Public Utilities

Volume 64 No. 4

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August 13, 1959

PROFESSIONAL ADMINISTRATORS AS REGULATORY COMMISSIONERS

By Lincoln Smith

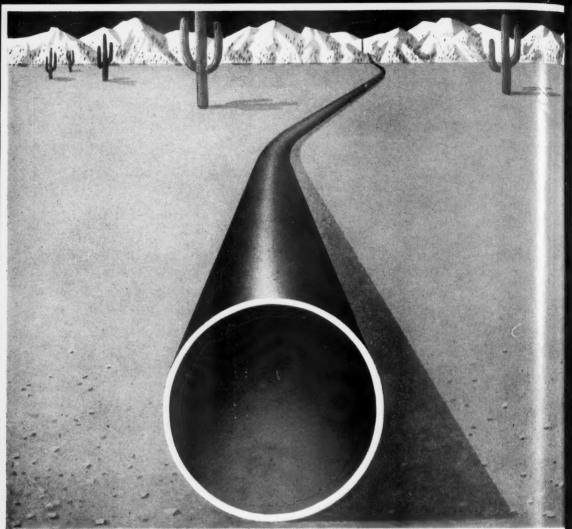
The Rôle of the Employee Magazine
By E. N. Pope

« »

Electric Power and Civil Defense
By Ralph V. H. Wood

Public Utility Regulation as Viewed by a Labor Economist

«



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Public Utilities

FORTNIGHTLY

Professional Administrators as Regulatory

VOLUME 64

AUGUST 13, 1959

NUMBER 4



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Pages with the Editors

The recent difficulties of the Federal Communications Commission in trying to work out some solution to its problem of "equal time" for political candidates is a good illustration of how the best of motives can sometimes result in the ridiculous. With all due respect for the FCC, the word "ridiculous" was used by none other than President Eisenhower to express his reaction to the situation created by the commission's ruling.

But note that neither President Eisenhower nor anybody else has offered much of an argument against the commission's decision on its own merits. And what were the merits? Well, the commission interpreted the Federal Communications Law to mean exactly what it says. And it says that when political candidates are given free time on the air (on either radio or TV), other candidates must be given an equal opportunity. The law does not say other "major party" candidates, nor does it suggest any test or classification or even a definition of a "candidate," such as might exclude a person chosen by even the smallest political party otherwise qualified to go on the ballot.

As we all know by this time, the whole fuss started when a candidate for mayor



E. N. POPE

in Chicago—a candidate of a virtually unknown tiny splinter party-demanded equal time because the Democratic mayor of Chicago happened to get some free time on the air in the course of a current events broadcast, Doubtless, if Congress had anticipated that the "equal time" provision could be invoked by infinitesimal parties to the point of becoming a nuisance, it would have been a very easy thing to include some protective language. The law could have exempted news and other current events broadcasts, or it could have restricted equal time to candidates of parties which have polled some reasonably substantial percentage of the vote cast in the last previous election.

But nobody anticipated the results of the Chicago incident. And the FCC, after due consideration, did not feel it should take the responsibility of writing into the law something that Congress did not see fit to put there in the first place. And so it will probably be up to Congress to make the necessary correction by legislative amendment.

Considering the hot weather, perhaps there are worse things that could happen to us as a nation besides being relieved of campaign oratory on radio and television, unless it is paid for by the sponsoring party. But it is rather ironic that the voluble Senator Humphrey, Democrat of Minnesota, should be the first to collide with the equal time barrier, because he was the first to permit an open avowal (by his friends, it is true) of his candidacy for the presidency. It looks like an example of the early bird getting set back for being early. Other presidential hopefuls one could name will probably think twice before allowing their candidacy to be announced until Congress clears up the muddle of equal time, which it will probably do now that the FCC has tossed the question into the lap of the lawmakers.

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REFERRING to conservative policy making by regulatory commissions, this ties into the opening article in this issue. Do professional administrative experts tend to be conservative along these lines and hesitate to embark on forthright policy decisions? That is one question posed in the article, entitled "Professional Administrators as Regulatory Commissioners." This is another in a series of articles by DR. LINCOLN SMITH of the faculty of New York University dealing with comparative professional backgrounds in the regulatory field. Through this series, DR. SMITH has taken up professional training in law, engineering, and other business experience in equipping members of the regulatory commissions to perform their duties more capably and effectively. Here he deals with a comparatively recent form of professional specialty—the administrative expert.

DR. SMITH is a native of Maine and a graduate of Bowdoin College. He holds a PhD in political science from the University of Wisconsin and is a specialist in public law and public administration. He is now teaching political science at New York University and pursuing research work.

E VERY utility company of any substantial size has developed an employee magazine. These are characterized by a wide range of variety. Some cling to the gossipy, personal type of publication which relies heavily on promotions, anniversaries, marriages, retirements, and such vital statistics. Other company publications take the view that there is a responsibility to tell the employees more about the impact of current events on their company operations, including such matters as public ownership and taxes. E. N. Pope, director of advertising and sales promotion of the Carolina Power & Light Company, whose article on "The Rôle of the Employee Magazine" begins on page 268, favors the latter view.

Mr. Pope is a native Carolinian and a graduate of Wake Forest College ('21).



RALPH V. H. WOOD

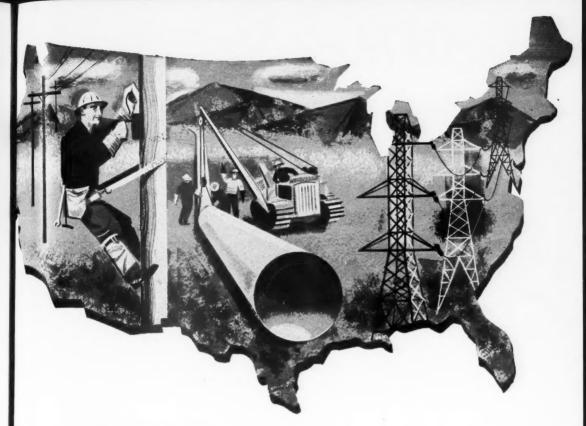
He has also done postgraduate work at Harvard University and joined the service of the Carolina Power & Light Company in 1923. He is past president of the Public Utilities Advertising Association.

The lifeblood of the industrial might of our nation is electric power. In the deadly game of survival posed by the cold war which could so grimly become a hot war, the electric power industry plays a vital rôle in meeting the challenge of the Communist bloc. RALPH V. H. Woon, director of defense of the Philadelphia Electric Company, in his article beginning on page 272, has reviewed civil defense plans for emergency action in meeting civilian requirements in the event of disaster, including enemy attack.

MR. Wood was born in Wayne, Pennsylvania, and educated at the University of Pennsylvania Wharton School. He has been with Philadelphia Electric since 1927. Prior to his appointment to his present post in 1954, he served as co-ordinator of defense for his company.

THE next number of this magazine will be out August 27th.

The Editors



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(August 27, 1959, issue)



POWER EQUIPMENT RESEARCH AND DEVELOPMENT—A KEY TO POWER COST CONTAINMENT

Heavy electrical equipment is not short cycle production by any stretch of the imagination, hence the importance of considering cycle buying as a negative factor in the task of holding the cost line of power. J. L. Singleton, group vice president of Allis-Chalmers Manufacturing Company, finds that ordering this type of equipment in cycles tends to disrupt the production system that is required to manufacture large items of power equipment. He also discusses present-day research and development, enabling the industry to fulfill its public service obligation.

STREETCARS FIND NEW LIFE ABROAD

Not long ago an American tourist visiting the exotic capital city of the Republic of Vietnam—Saigon—came across a curious discovery. While taking pictures of a rather nondescript streetcar, he decided to board the car just for a ride. Imagine his surprise when the interior of the streetcar revealed that it had once done service on the streets of an upstate New York city and some of the old streetcar advertising, torn and faded, still adhered to the advertisement panels. The fact is that a good many superannuated American streetcars are finding their way into foreign countries for various uses. Herbert Bratter, Washington, D. C., author of business articles, has made an interesting study of what happens to our streetcars when such lines are discontinued. Evidently these old-timers are going to a lot of places around the world beside the junk pile.

ACQUISITION ADJUSTMENTS IN RATE CASES

What happens to the difference between original cost of utility property and the price paid when it is sold later on? The treatment of "acquisition adjustment" has not been as controversial in recent years as it once was. But there are still plenty of differences among the regulatory commissions on how "acquisition adjustments" should be handled. Samuel M. Koenigsberg, Newark, New Jersey, attorney, makes a study of the different practices and gives a readable account which the layman, as well as the lawyer, can understand in this important area of regulation.



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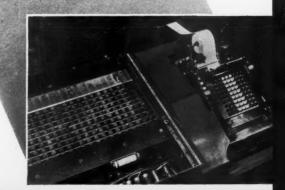
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—MONTAIGNE

WATKINS M. ABBITT U. S. Representative from Virginia.

"[People must learn that] what we spend we must pay from taxation or add to the public debt as a deficit."

CALVIN B. HOOVER Professor of economics, Duke University. "The survival of liberty seems to depend upon the ability of the modified forms of Capitalism of the Western world to survive."

Barnaby C. Keeney President, Brown University.

"If the federal government says what shall be taught and studied, it may freeze the advancement of knowledge for an indefinite period."

EARLE J. MACHOLD
President, Niagara Mohawk
Power Corporation.

"It is clear that there is no need and no sense in pouring millions into large-scale atomic plants to produce power that we can obtain in abundance and much more economically from other sources. Crash programs are sometimes justified in times of dire necessity but there is no such necessity now in the United States."

Daniel P. Loomis
President, Association of
American Railroads.

"Featherbedding and its destructive concomitants—overregulation, government discrimination in favor of our competitors, excessive taxation—have reduced the railroads, America's work horse for mass transportation in peace and war, from carrying two-thirds of the total traffic at the end of World War II to only about 45 per cent today."

FRED A. SEATON Secretary of the Interior. "If we cannot do better than we are, when everything on the business barometer is perfect, then I don't see how the United States can ever do it. . . . Self-discipline is needed. It is almost incredible to me, almost a monstrous thing, the way people condone deficit financing. I simply for the life of me cannot see how our people can be thus lulled to sleep. . . . We are spending five times as much for yesterday as we are for tomorrow."

Editorial Statement The Wall Street Journal.

". . . trying to apply the rule of law to agreements with Communists would almost surely be a futile exercise. The reason is simple: The Communists aren't interested even in the desirability of a rule of law in international relations. There is no common ground between their ideas of 'legality' and our concepts of domestic and international justice. For them agreements are to be made if it suits the policy of the moment; they are to be broken the moment it suits policy to break them. Injecting the World Court into an agreement would no more keep them from breaking it than the U. N. Charter does."

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BOILER No. 2

Average Metal Temperature Deviation 1035 F

± 50F

BOILER No. 3

Average Metal Temperature Deviation 1125 F

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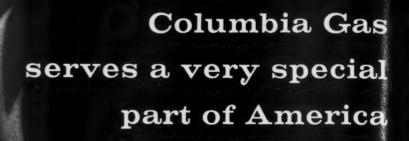
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AUGUST

Thursday—13

American School Food Service Association ends five-day meeting, San Francisco, Cal.

Friday-14

International Association of Electrical Leagues ends four-day annual meeting, San Diego, Cal.

Saturday-15

International Association of Electrical Inspectors, Southwestern Section, will hold meeting, Santa Rosa, Cal. Aug. 31-Sept. 2. Advance notice.

Sunday-16

Georgia Association of Broadcasters begins summer meeting, Jekyll Island, Ga.

Monday-17

Summer Communications Course begins, Cambridge, Mass.

Tuesday-18

National Association of Educational Broadcasters begins seminar, Madison, Wis.

(1)

Wednesday—19

Metallurgical Society of the American Institute of Mining, Metallurgical, and Petroleum Engineers will hold meeting, Boston, Mass. Aug. 31-Sept. 2. Advance

Thursday—20

Illuminating Engineering Society will hold annual national technical conference, San Francisco, Cal. Sept. 7-11. Advance notice.

Friday-21

Tennessee Telephone Association will hold annual convention, Nashville, Tenn. Sept. 9, 10, Advance notice.

Saturday—22

American Water Works Association, Canadian Section, will hold annual meeting, Liverpool, Nova Scotia, Canada. Sept. 9-11. Advance notice.

Sunday—23

Arkansas Broadcasters Association begins meeting, Hot Springs, Ark.

Monday—24

American Bar Association begins annual meeting, Miami Beach, Fla.

Tuesday—25

American Institute of Electrical Engineers begins petroleum industry conference, Long Beach, Cal.

INC

DUP: THE 15, OHIO

Wednesday—26

Mid-West Gas Association begins gas school and conference, Ames, Iowa.

B

Thursday—27

Pacific Coast Gas Association will hold annual meeting, Los Angeles, Cal. Sept. 9-11. Advance notice.

Friday-28

American Dietetic Association ends five-day meeting, Los Angeles, Cal.



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Whirlybird Work Horse

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Public Utilities

FORTNIGHTLY

VOLUME 64

AUGUST 13, 1959

NUMBER 4



Professional Administrators as Regulatory Commissioners

By LINCOLN SMITH*

Today commissions are large, complex organizations with a definite need for internal management and direction. A professional administrator is important, but he does not necessarily have to be a commissioner. In fact, he might function better in a subordinate position under the title of "administrative secretary."

This study, which is part of a series of occupational backgrounds of regulatory commissioners, explores a hitherto neglected aspect of the qualifications of national and state commissioners. The canvasses made for Public Utilities Fortnightly in 1929 and 1954 did not single out the number of state commissioners who claimed to be administrative experts.¹ Likewise, the category was ignored in previous studies of national commissioners.² The writer's research over

a span of years³ indicates that a considerable number of public regulators contribute to their agencies' administrative ability.

Political leaders responsible for commissioners pay some attention to this qualification in the selection of quite a number of commissioners. It seems to be an even more prevalent condition for agencies on which chief executives are empowered to name the chairman. Practical investigation has revealed this phenomenon; but additional inquiry is necessary before proportionate significance can be

^{*}Associate professor of political science, New York University, New York, New York. For additional personal note, see "Pages with the Editors."

assessed and numerical importance ascertained. What are the merits and limitations of the administrative factor in the appointment of commissioners? What can be said of the alternative of providing administrative expertise either (a) below the administrative policy-making level, or (b) in a position akin to that of permanent under secretaries in Great Britain?

Before defining the term "professional administrator," administration should be distinguished from the executive function. Many years ago much of public regulation belonged in executive categories. The statutes then tended to be specific and enumerated carefully the various precepts by which the agencies were guided.6 Commissioners were required to carry out quite definite orders wherein relatively little room was open for the exercise of independent judgment. The executive nature of the task was further demonstrated historically by the fact that in several states only one commissioner served full time.

Composite decision of three or more men was a relatively new idea in public administration. Although more than a glorified clerk, the executive's conduct was guided by predetermined rules, procedures, and formulas which relegated his rôle to a ministerial one. Occasionally, in some jurisdictions, his functions approached those of a quasi automaton. His responsibilities were extensive; but his function was essentially that of supervision. His rôle as a policy maker was and is almost nil.

Regulatory Functions Have Changed

DEVELOPMENTS in technology, standards of living, and complexity of

AUGUST 13, 1959

regulatory problems over the years have necessitated expansion in the jurisdiction of regulatory agencies. Both the substance and depth of regulation were affected. More specialists were needed on the commissions. Legislative policy makers were forced to rely on wide discretion, under the law, of from three to eleven commissioners to keep pace with dynamic changes in the field of regulatory administration. Hence, the nature of the task has changed from an executive one to that of administration. The term is virtually synonymous with management.

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The administrator, like an executive, is charged with fulfilling rather specific mandates within the field of administrative law. But in the discharge of his duties, considerable amplitude of discretion is vested in him.⁸ Not only must he obey basic directives, but also improvise and make supplemental rules in pursuance of the definitive objectives of his organization. He operates at the administrative policymaking level. One authority cogently summarized the difference in this way:

Regulatory administration is more complicated than the traditional "executive" activities. It involves much more room for the exercise of individual judgment or discretion. The scope of "administration" in this sense has had such a tremendous development that the mode of its conduct vitally affects us all.9

In the last decade or two, legislative authority places greater reliance on the planning function by regulatory agencies. Commissioners, frequently through their chairmen, are required to recommend to Congress and state legislatures not only

PROFESSIONAL ADMINISTRATORS AS REGULATORY COMMISSIONERS

plans for changing basic statutes but also comprehensive blueprints for development of power, natural resources, and other substantive matters of regulation.10 The theory is that the expert commissions should make recommendations which political leaders may accept, modify, or reject in the formulation of public policy. Hence, planning now is an integral part of the administrative process. Regulation today, then, requires intelligence, investiture of broader discretion in top regulators, energy, and judgment from men of unimpeachable character. Included somewhere among these ingredients must be an element of administrative ability to make the vast regulatory establishments function.

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Qualifications of Professional Administrators

The professional administrator further must be distinguished from the so-called amateur or layman. Elementary characteristics of the latter were described in a previous article. Numerous authorities classify the "generalist" as a profes-

sional administrator, making the two terms synonymous. After careful analysis, however, the writer feels that a professional administrator is an entity in himself. The "generalist" is like an amateur, the average voter, common man, or good citizen. He is not a specialist, but qualifies for a commissionership because he has a knack of grasping the main points at issue, and possesses keen, perceptive, critical mind, command of ideas, and sure common sense.

The professional administrator duplicates the layman in all of these qualities. In addition, though, the professional administrator has a special ability or function; namely, that of directing and guiding subordinates, and in getting things done. His is a technique rather than the substantive knowledge of men from the regular professions. He is a "generalist" or layman, plus the increment of his particular ability as an administrator—a trait which amateurs or laymen commonly lack. The attribute combines "know-how" and leadership, or, as the French express it, savoir-faire.

PROFESSOR DIMOCK aptly summarized the qualifications as belonging to one "who commands the best balance of physique, mentality, personality, technical equipment, philosophical insight, knowledge of human nature, social adaptability, judgment, ability to understand and to get along with people, and a sense of social purpose and direction." Ramifications of the administrator's specialized skills include understanding of men, how to get along with them, and how to merge the group into a "going concern," well integrated and co-ordinated into a working team. It is a quality over and above that of the art of leadership 4—it involves "wisdom in council."

Many professional administrators come from the business world. Despite numerous differences between public and private administration, the two simultaneously have numerous affinities. The

business administrator must make many personal and professional adjustments when he accepts an administrative post clothed in public responsibilities. For the last decade or two, however, the better

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schools of business administration have been training students in management for both private and public responsibilities. The new trend in business education promotes an interchangeability of rôles between public and business administration. Future graduates of the modern training programs will be able to choose between public and private employment; many may serve each in tandem capacities. They scarcely will be comparable with business executives of the old school:

In the business world to come, management will become more analytical. Increased emphasis will be placed on administration per se... The status of the manager will become increasingly that of a co-ordinator of diverse interests and "pulls" in the modern firm and in the modern society, as distinct from being "the boss" responsible only to a small group of stockholders....

Tomorrow's managers will not be specialists in one thing to the exclusion of all else.

Rather, they will be men with intellectually sharpened minds: men trained to think and who are not afraid to do so, even with daring times.¹⁶

THE rationale for a professional administrator as commissioner is predicated on the undisputed fact that nearly all of the some 60 national and state regulatory agencies are large, complex, and highly specialized entities. Their tasks are multifarious, ranging from matters of policy direction down to those dealing with specialized functions. Somewhere in the chain of command is a dire necessity for co-operation, co-ordination, and timing, as well as an element of political direction, in order to bring order out of chaos.

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Commissions Require Direction and Management

DESPITE the fact that most commissions are "going concerns" with a considerable amount of momentum emanating from permanent staffs, there is a genuine need for internal management and direction. The agencies are, to be sure, replete with experts, leaders, and men of good intentions. But qualities over and beyond these are essential; namely, those of men trained or experienced in administration. Usually the chairman of the organization is charged with primary responsibility for the general administrative function.



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The basic task was well summarized by a university president and expert in public administration as follows:

At all times and in every way possible the administrator emphasizes the common purpose which unites the efforts of the administrative group. He must serve as the unifier of the whole, must endeavor to make the common purpose not just the sum total of the parts but rather the guiding light of the constituent specializations. The very nature of the organization requires this element of leadership. . . . Leadership can provide the unifying sense of purpose which infuses the energies of all parts of a great administrative endeavor into a common purpose and achievement.17

Administrator Keeps Agency in Focus

HE need for dynamic administrative THE need for dynamic talent is axiomatic in any large public or private agency. The administrator can exercise sound judgment. He can see and keep the entire picture of the agency in focus; he sees all phases as parts of one interrelated whole. This is perspectiveone of the current essences of both public and private administration. Although the administrator lacks the knowledge of specialized phases of regulation, he possesses the talent to make use of specialists who do have those professional skills. When the chairman of a commission happens to be a lawyer or member of another profession who possesses, in addition, a flair for administrative management, there is little room for argument about a happy combination between knowledge of one of the substances of regulation and the topic considered in this article. Then the commissioner can act like a quarterback or field general who not only runs the team of colleagues and staff but also can participate actively in the functions of the group.

The ever-recurrent and tenacious commissioner-staff relationships are noted this time only in passing. The professional administrator is not familiar with the specialized disciplines of the various staff compartments. But his ability in management and direction enable him to get the maxima from tenure members, and to distribute the work load in proper sequence for a desirable end result. This, after all, is the ideal situation between policy maker and expert.18 But reliance of either professional administrator or amateur on staff assistants with tenure is likely to produce a questionable commission-staff combination quality in the work of the administration and a static atmosphere in the regulatory process of the agency.

Some Pitfalls in Administrator's Path

MANY serious obstacles are present when a case is attempted to justify the selection of a commissioner solely on the basis of administrative ability. They are particularly grave in situations where the administrator-commissioner serves as chairman of the agency, operating at the apex, and enshrouded in a position of great magnitude which permits him to dominate many phases of the agency's work. Many of the weaknesses of the professional administrator as commissioner are similar to those outlined in the article on laymen-commissioners. Their intellectual capacities may be limited, and their expertise in administration may be exaggerated. These men sometimes really lack trained and disciplined minds; they

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must grope with problems with which they have little or no familiarity. Such people have proclivities towards oversimplification and superficiality. The sweep of the mind is wide, but often shallow. They are "generalists" par excellence, but in areas over which they make no pretense of capacity to cope intrinsically. The dangers, however, are more than these.

In the first place, the professional administrator is steeped in methodology rather than in substantive knowledge. He is a master of pedagogy in an administrative sense, which may be innate or acquired. Stress is on process, procedure, and techniques. Relatively neglected, however, may be such qualities as perspective, broad grasp, and overall patterns. Formal or informal training in administrative

methods de-emphasizes the mental discipline and profundity exacted in the professions. They are equipped to deal with fairly simple and not multidimensional matters; many even have marked skill and tact in trouble-shooting problems. But such competence does not necessarily fit its possessors to contribute much to the affirmative force and drive of regulatory administration; neither does it prepare them to make decisions and take responsibility therefor at the administrative policy-making level.

As a corollary to this vulnerability, the administrative specialist is prone to overemphasize management at the expense of policy decisions, and to react rather statically to regulatory situations which require dynamic and often unprecedented solutions.

Professor Bernstein Tells Us:

THE expert in administration, like experts in other professions, tends to exaggerate the importance of his skills, the skills of management. He usually fails to note the limitations of his tools. He seeks to apply them in some uniform and impersonal fashion to matters which require variable treatment. He frequently strives to tailor the program of his agency to set the pattern of administration suggested by his inflexibile tools and skills. He is apt to insist on organizational patterns which satisfy his expert judgment, but which fail to facilitate the achievement of the organization's basic objectives. He is inclined to regard system and red tape as inviolate even though they may add little to or actually detract from the administrative process." 19

Another Slant on Administrative Talent

THOSE who are disposed to agree that public administration is a procedural instead of a substantive element may be content to consign this function below the top level in the regulatory hierarchy. Granted that the chairman of the agency will assume responsibility for its management ends, much of the actual performance frequently is delegated to a highly responsible subordinate official, sometimes

in a semifiduciary relationship. This generalization certainly is correct when applied to several representative national and state commissions with which the writer has some familiarity.

The faithful and protracted service of the secretaries of several national commissions are so well-known that reference to their records here would be superfluous. A number of these men rose to positions of administrative pre-eminence in their

PROFESSIONAL ADMINISTRATORS AS REGULATORY COMMISSIONERS

respective agencies, occupying eventually rôles closely akin to those of permanent under secretaries in the much-lauded British classified service. Not quite so familiar are methods employed in states. The models used in this study are the New York and Wisconsin commissions, which are reputed to be two of the outstanding agencies in the United States, and the Maine Public Utilities Commission, which is representative of the better than average tribunals.²⁰

HE secretary of the New York Public Service Commission assists the chairman in the performance of the management function. The statute designates the chairman chief executive officer. 91 He is assisted primarily in this task by the secretary, or comparable colleague named by the commission.22 The secretary is in charge of the administration bureau of the department. Although the secretary is not a tenure employee, he is not, according to custom and practice, removed at will. He operates at an administrative policymaking level, subordinate to that of the chairman. Routine secretarial functions are executed at lower echelons in the hierarchy.28

The organization of the Wisconsin commission shows many affinities with that of New York. The secretary is the chief administrative officer, answerable to the commission. The chairman, in conjunction with the other commissioners, determines policy matters. Below this, administrative responsibilities are delegated to the secretary. He is chief of the administration department, one of the six departmental subdivisions of the organization. The secretary has permanent civil service tenure, as do all other members of the agency, except the three politically appointed commissioners.²⁴

HE title "official clerk" is something of a misnomer for the Maine Public Utilities Commission, because this official is assigned a type of work over and above ministerial functions. He acts as aide and chief administrator to the commission. He is charged with general housekeeping matters and is concerned with regulatory items submitted to the commission for action. But in addition to these clerical duties, the secretary performs administrative tasks which require discretion, tact, and expertise, subject, of course, to the collective will of the commissioners. He is appointed by the commission, with no time limit specified. The realities of his position can best be indicated by a description of the knowledge, skills, and abilities required. 25

A DIFFERENCE between the three commissions, one largely of degree, is that New York elevates the office of secretary somewhat outside the classified service and into the area of political sensitivity. But the relationship is rather flexible, varying from time to time with the dynamics of personalities and complexity of problems confronting the agencies. Human equations, rather than legal kinship, frequently determine the rôle and status of administrative operations on all national and state agencies. The fact remains, nevertheless, that insight gleaned from explorations into three respected regulatory commissions reveals that the bulk of the administrative function is performed on a plane above that of ordinary staff yet always subject to the jurisdiction of the commissioners.

A Look at Administrative Assistants

A FINAL angle on the submersion of administration below the surface requires analysis of administrative assistants. In 1952 a total of 19 states had such an official: Ohio, New York, Minnesota, Connecticut, Kansas, New Jersey, West Virginia, Virginia, North Carolina, Wisconsin, Illinois, Massachusetts, Colorado, Washington, Kentucky (PSC), Michigan, Pennsylvania, California, and Georgia. These states had from one to eighteen administrative assistants each, one being usual. Appointment was either by civil service or by the commission. No time limit was placed on any of the positions.

The wide range of salaries suggested that although a few probably performed secretarial duties essentially, a considerable number were well up on the salary scales to occupy places commensurate with positions of prestige and responsibility. No pattern was discernible in regard to administrative assistant-secretary positions.

Before the office of executive assistant was eliminated in New York, the official was primarily concerned with the administrative processes of the department, including budget, finance, and personnel. The secretary then was occupied almost exclusively with regulatory details submitted to the agency for action. More recently, the major part of the duties of the executive assistant have devolved upon the secretary.

Shortcomings of Subordinates

PRIMARY reliance on subordinate officials for administrative work of a commission is frought with pitfalls, both procedural and organizational. At times it is

impossible to separate the administrative function from policy determination, because the two are complementary and intricately intertwined.²⁷ If the official responsible for administration as its affects policy is insulated from the political climate, a component element of the decision-making process is in the hands of irresponsible bureaucracy. But this danger is more apparent than real. The obvious guaranty against such a contingency rests upon proper procedural safeguards. These, in turn, depend upon a well-co-ordinated and integrated institutional setup.

Another aspect that bears watching is the possibility that subaltern officials may arrogate to themselves a considerable amount of authority which was intended for policy makers. The history of regulation contains concrete examples wherein this possibility became a reality. At one time the Federal Power Commission was said to be under the domination of its executive secretary.28 More recently there were charges and countercharges that the general manager of the Atomic Energy Commission ran the show, pushing the commissioners into advisory capacities.29 These difficulties occurred early in the history of each agency, and were caused, in part at least, by organizational defects.

THE FPC originally was composed of three ex-officio and part-time commissioners; it was quite natural for them to rely on permanent members. Subsequently, after trial and error, the agency was reorganized with three full-time commissioners. The case cited when the AEC was in its infancy was remedied by administrative expediency. At first the general manager was a semi-independent official appointed by the President, but legislation

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placed him in the administrative span of control under the collective thumbs of the five commissioners. Adequate organization is assumed before critical analysis of the administrative function is undertaken for any regulatory agency.



Regulatory Process Must Have Good Administrators

THIS article offers the suggestion that the administrative function is an integral part of the regulatory process. It concludes, however, that there is no logical basis to insist that administrative expertise should be the sole attribute for the selection of one or more commissioners. Although the chairman has certain administrative prerogatives at the top of the organization, they are essentially matters of political direction. They are similar to the duties and responsibilities of the chairman of almost any board of directors. They are not analogous to techniques or methods by which ultimate administrative policy decisions are made and responsibility therefor assumed. Below the policy determiners in any large organization, public or private, are expert managers and secretaries skilled in management.

The rôle of the administrative function is not belittled when it is relegated to subordinate status in the chain of command.
The working hypothesis considered here is that the major portion of administration is performed by ranking subordinates; final responsibility, however, rests with the commissioners. Whenever defects materialize, they often are those of organization or of personality difficulties rather than any inherent in the trichotomy of
(1) policy direction, (2) administration or management, (3) staff expertise.

The postulate which remains is that the function of administration or management is best performed by apolitical specialists who are responsible to politically chosen commissioners. For best results they probably deserve a position exalted from that of regular staff, yet inferior to top status. By either law or practice, numerous commission secretaries enjoy this very focus today. Some of them approximate British permanent under secretaries in all but name. They may well be compared

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with the rank of warrant officer in our military polity-high up in the chain of command, indispensable, and yet not responsible for strategy and only occasionally permitted to delve into the realm of

tactics. It does not follow, though, that a warrant officer or professional administrator should be elevated to primacy merely because his contributions are essential to a large organization.

Footnotes

1"The Trend from Lawyers to Laymen as Commissioners," by Francis X. Welch, Public Utilities Fortnightly, December 26, 1929, pp. 801-807; "Trend from Lawyers to Laymen on State Commissions," by Lincoln Smith, ibid., November

Commissions," by Lincoln Smith, *ibid.*, November 11, 1954, pp. 630-639.

2 "Professional Qualifications of Federal Regulatory Commissioners," by Lincoln Smith, Public Utilities Fortnightly, Part I, November 25, 1954, pp. 683-694; Part II, December 9, 1954, pp. 752-761; "Federal Commissioners," by E. Pendleton Herring (Cambridge, 1936).

8 This includes both academic and pragmatic contests with representative state and national agen-

tacts with representative state and national agen-

cies for two decades.

4 For example: "Administrative ability and previous public service records have blended in the appointment of commissioners in Connecticut." "Regulative Agencies." by Marver H. Bernstein, Part II. Connecticut Public Utilities Commission (Novem-

ber 21, 1955), p. 5.

8 Numerous state and national administrative reorganization programs in recent years have stressed a need for allowing the chief executives to name commission chairmen.

6 "Thus we tend to use the word 'executive' for the organ which performs functions especially enumerated in the Constitution as belonging to the executive." "Administration and the Rule of Law,"

by J. Roland Pennock (New York, 1941), p. 3.

Administrators are defined as "those charged with the management of the executive department of the government." Bouvier's "Law Dictionary," by John Bouvier. Vol. I, eighth edition. (St. Paul, 1914), p. 138.

8 "The term is also widely used to refer to those

parts of the whole executive branch to which the legislature has delegated discretionary powers, those which dispense specialized services, and those whose functions are largely investigatory in character.

Pennock, op. cit., p. 4.

9 Ibid., pp. 5, 6. Professor Schubert calls this administrative realism. "The administrator is a mere catalyst by means of which conflict among special interests is transmuted into the public interest, which is found in the satisfactory (i.e., peaceful) adjustment of these conflicting interests. . . . The administrative realists have defined the problem of the administrator in terms of the political process rather than in terms of administrative efficiency or natural law." "The 'Public Interest' in Administra-tive Decision-Making: Theorem, Theosophy, or Theory?" by Glendon A. Schubert, Jr., in *The* American Political Science Review, June, 1957, pp.

348, 367.

10 Typical of most national and state commissions

is this mandate to the FPC—that it make studies and submit its findings to Congress. (16 USCA § 800.) It must issue licenses in a pattern adapted to a comprehensive plan for developing waterways, Ibid., § 803. The need for integrated transportation and communications systems are other cases in

point.

11 "Laymen as Regulatory Commissioners," by Lincoln Smith, in Public Utilities Fortnightly. Part I, May 21, 1959.

12 "Administration is method, The . . . means of getting jobs done." "Administration of National Economic Control," by Emmette S. Redford (New York, 1952), p. 13.

Economic Control," by Emmette S. Redford (New York, 1952), p. 13.

18 "The Executive in Action," by Marshall E. Dimock (New York, 1945), p. 11.

14 "The Art of Leadership," by Ordway Tead (New York, 1935); "The Art of Administration," by Ordway Tead (New York, 1951).

15 "Wisdom in council and a capacity to size up alternatives and to choose between them may be the real hallmark of a 'good' commissioner." "Public Utilities in American Capitalism," by Martin G. Glaeser (New York, 1957), p. 239.

16 "Training Tomorrow's Managers," by W. F. Wilmas in "Proceedings of the School of Commerce." Eighth Alumni Dean's Day Homecoming. New York University Business Series No. 35. De-

merce." Eighth Alumni Dean's Day Homecoming. New York University Business Series No. 35. December 6, 1958, pp. 72, 73.

17 "Management in the Public Service," by John D. Millett (New York, 1954), p. 42.

18 Ex-President Truman amplified the point visavise expert and administrator: "For instance, when we set up a scientific commission of any sort, it is necessary to find out the scientists who are best informed on the subject. Then it is necessary to find administrators who understand administration and who are willing to take advice from scientists who are doing the work. . . ." "Year of Decisions," memoirs by Harry S. Truman, Vol. I (New York, 1955), p. 330.

19 "Regulating Business by Independent Commission," by Marver H. Bernstein (Princeton, 1955),

20 The situations in these states are unusual in that the incumbent secretaries have extremely high professional ratings in the regulatory field,

21 Public Service Law, New York, Art 1, § 3. 22 Ibid., § 7.

23 For an excellent structural outline of the New York commission, see: Organization Charts, Public Service Commission, Department of Public Service. October 1, 1956. Although outdated, much pertinent information may be found in "Utility Regulatory Bodies in New York State 1855-1953." An Outlier of the Development and S. Outline of the Development and Scope of Regula-

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tion, State of New York Public Service Commis-

tion. State of New York Public Service Commission (Albany, 1953).

** For a splendid organization chart and personnel information, see: "Biensial Report," July 1, 1956-June 30, 1958, Public Service Commission of Wisconsin (Madison, December 1, 1958), pp. 33-41.

**Considerable knowledge of the principles and the public of the publ

practices of business administration as applied in public service. Knowledge of the functions of state government and of the relationships between departments and between the state and other levels of government, Exceptional ability to understand and interpret laws and rules and their application to specific cases. Considerable ability to plan and orspecific cases, Considerable ability to plan and of-ganize work, to develop and effectuate procedures, and to maintain co-operative relationships within the organization, and to supervise the work of others, to deal effectively and tactfully with the public and with officials and employees in private industry where enforcement of laws and rules is concerned. Initiative, judgment, and dependability."

86 "Report of the Special Secretarial Offices Com-

mittee." National Association of Railroad and Utilities Commissioners (Washington, 1952), p. 43. The 1957 report of this committee contains a valuable summary of some of the internal operations of a number of representative state and federal commissions, pp. 2-29.

27 Fact and opinion are often inseparable, because selection and exclusion among the former contribute materially to the ultimate decision. The same principle holds in the relationship between questions of fact and questions of law.

28 "Public Administration and the Public Interest," by E. Pendleton Herring (New York, 1936),

29 "Recent Trends in the Appointment of Commissioners," by Lincoln Smith, in Ohio State Law Journal, Autumn, 1952, p. 488.

⁸⁰ See: "Government and Science," by Don K. Price. Their Dynamic Relation in American Democracy. James Stokes Lectureship on Politics, New York University (1954), p. 22.



Those Utility Tax Payments

//WASHINGTON county, Oregon, is predominantly rural. There are no large centers of population. And this county has had to deal with a pressing tax and revenue problem. It continually needs more money, primarily for the schools.

"The county, in other words, is in the same boat as multitudes of local governments throughout the nation. Despite rising property and other local taxes, there's never enough money to meet needs and desires.

"This gives significance to something that happened in Washington county the other day. The county's two largest taxpayers turned in their property tax checks. Both are business-managed utilities. The largest of the two is an electric company, the second, a telephone company. The payments marked all-time highs. That of the electric company alone—almost \$255,000—would be sufficient to educate close to 700 county students.

"Suppose, now, that the county didn't get these payments—because the utilities were government-owned operations, and hence tax free. What would happen to the tax bills of all the remaining

taxpayers?
'This homely little illustration has a universal application. Everywhere in the country where business-managed utilities are in operation they are among the largest and most dependable taxpayers. Actually, something like 24 per cent of all power company revenues go to federal, state, and local governments in taxes.

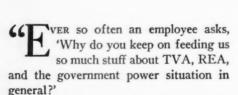
"The way to inflate our already brutal tax burden is adopt more Socialism."

-EXCERPT from Industrial News Review.

The Rôle of the Employee Magazine

By E. N. POPE*

Why not use the medium of the employee magazine to inform employees as to how government ownership affects their jobs? Such articles, keyed to their self-interest, will be read and contribute to better understanding of the problems and goals of management.



"In the first place, every employee of an investor-owned utility, like Carolina Power & Light, has, or should have, an interest in what is being done by government power advocates to undermine the security of power company employees. Anything that affects the security of your company affects your own security. It seems to me therefore that instead of questioning the advisability of devoting liberal space in the [company's employee magazine] Spotlight each month to what is going on in the public versus private power fight, employees should welcome an opportunity to be kept abreast of developments.

"The controversy is no longer a partisan matter. Whether you are a dyed-in-thewool Democrat or a rock-ribbed Republi-



can is of no concern to the company. Facts are facts regardless of their political origin. A proposal to undermine your security is no less damaging if it happens to originate with the political party of your choice. If someone starts hacking at my neck, my first thought is my defense. The pain is not lessened if I happen to learn that the person doing the hacking and I are members of the same political party, church, or civic organization.

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THE information given you from time to time in the Spotlight regarding the public versus private power fight is based upon fact—every word. It is provided in the hope that every employee of the company is interested in fortifying himself or herself with facts in order that he or she may be in better position to defend not only the company but his or her position with the company. Keeping abreast with what is going on in the fight to protect investor-owned utilities against further encroachment by government may not make you a better meter reader, it may

^{*}Director of advertising and sales promotion, Carolina Power & Light Company, For additional personal note, see "Pages with the Editors."

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not improve your ability to pound out a letter on a typewriter, it may not improve your efficiency as an engineer, accountant, or sales representative, but it will make you a better employee.

"Think it over-we think you'll agree."

THE above is an editorial which appeared under my by-line several months ago in the employee magazine of Carolina Power & Light Company, the Spotlight. It serves as a basis for the following discussion.

Although the editorial was prepared for employee reading, the very fact that an employee occasionally voices opposition to the use of a company publication for the discussion of public power emphasizes the necessity for the launching of programs designed to create among employees a self-interest in such matters.

Too Much Trivia

EMPLOYEES of the electric utility industry should not be criticized for an attitude which company publications have helped to develop. It has been my observation that most employee magazines in the electric utility industry have devoted themselves to trivia. True enough, an employee likes to see his name in print. It tickles his pride when he sees a photograph of himself engaged in the pursuit of a hobby in which he has a consuming interest.

Employees generally like to know what is being done by employees in other areas of the company system. I cannot help but wonder, however, if on occasions employees, themselves, do not wonder why the company continues to finance a publication which, after it is read, leaves the

employee uninformed regarding matters of company policy or plans and programs which have a direct influence upon his own well-being.

The average tenure with the company of our more than 2,000 employees is in excess of twelve years. That fact alone would seem to indicate that the average employee of the company is interested in his work and expects to continue with the company to retirement. There are, of course, exceptions. If there were not, we would not be asked on occasions why we persist in the publication of certain types of information in which the employee asking the question has no interest.

However well accepted the employee publication may be, it cannot do the whole job of employee education even if every employee reads every word of every issue.

Why Employees Are Apathetic

To my way of thinking, there are two reasons why some employees fail to share management's interest in all matters discussed in the employee publication.

First, a good percentage of employees came of age under a philosophy which differs widely from that which influenced the "old-timers." In the case of the "old-timer" jobs were scarce. The very fact that he was able to get on somebody's payroll instilled within him a certain degree of loyalty which the new philosophy seems not to embrace. He worked hard and he worked many hours. He did not object to taking on new assignments and additional responsibilities without a commensurate increase in pay. Next to his family and possibly his church, his job was the most important thing in his life.

In recent years, jobs have been plenti-

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ful; and, unfortunately, too many of our young men and young women have come out of college with the understanding that they do not have to work—that their security is a government responsibility. A job, therefore, is weighed in terms of whether or not it will produce enough income to meet immediate demands, and at the same time not impose too much of a burden in terms of time and effort. The recounting of an interview I had with a job applicant not too long ago will illustrate what I mean.

Modern Job Attitudes

The young man in question was about to finish college as a journalism major. He wanted a job in advertising. It so happened that we were anticipating a vacancy in our advertising department at the time he made his application. His family background, appearance, his grades in college, and recommendations he brought with him all were in his favor.

I began to describe the job requirements when he interrupted by saying that he would like to ask me a few questions. He proceeded with the following: How much does the job pay? Would I have to work on Saturdays? How many holidays does your company give employees? How much vacation with pay? If I begin work with your company after graduation, how much vacation will I get during the summer immediately following?

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I's suddenly occurred to me that this young man did not want a job. He wanted to be on somebody's payroll but seemed little concerned with earning the right to get on it or stay on it. It was abundantly evident that he did not want his work to interfere with his pleasure.

Fortunately, the new philosophy has not influenced all young people to that extreme. Regardless of the care with which applicants are screened, we employ some who take the position that they were employed to perform a specific task—no more or no less. They do not have to worry about long hours. They do not care to concern themselves with matters which are not directly connected with their job assignments.

We Do Not Spark Their Self-interest

THE next reason why some employees fail to share management's interest in certain matters discussed in the employee publication is our failure to conduct on a continuous basis courses of education or training designed to relate such matters to employee self-interest. Wanting an employee to read all that is published in the company magazine about government power is one thing. Making him want to read it is a thing entirely different. All of us, at whatever level we may fit into the organization, read what we want to read. If government encroachment in the electric utility industry is something an employee knows nothing about and consequently cannot relate to his own well-being, he concludes that articles on the subject are published in the employee magazine to suit the whims of management and is perfectly satisfied to leave the reading of such articles to those members of the organization who can relate them to a self-interest.

We make no claim at CP&L that our employee magazine is a model of per-

fection. We believe it is a better publication than it was a few years ago. We know

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that it can be further improved. We are willing to make any further changes in its editorial policy which may be designed to make it a better means of communication. We know perfectly well, however, that it will never serve a maximum advantage unless and until employees generally can be brought, through other means of com-

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munication, to an understanding that the job of defending the company against government inroads is a job for every employee on the payroll—that anything which has an adverse effect upon the company will have an adverse effect upon every employee of the company regardless of the nature of his job.



Responsibility of Government

"... by a curious sort of inverted logic, many people do argue—or accept as a matter of course—the proposition that the federal government must grow larger in size, cost, and complexity simply because the nation's population is rapidly growing larger. . . .

"Indeed, the question as a whole is not so much of population but of choice. Whatever one may think of the political philosophy of large or of limited government, the most important practical decision is what level of government should do the things the people think should be done by government at all

"And it can hardly be emphasized too much that it is on the lowly ground of the local community, not in the abstract entity of the national government, that the population pressures are in fact felt and are important. It is there that the problems arise—as well as the advantages of added prosperity that may come from having a growing number of producers in a growing population. But if the problems are transferred to Washington, the advantages—along with local control and responsibility—disappear. . . .

"It stands to reason that a sizable reduction of federal spending would put the localities in much better shape to deal with such additional questions as may be occasioned by population pressures now and in the future. We are constantly told, however, that such a reduction is not in the cards, that it is politically unrealistic to expect Washington to cease carrying on wasteful and needless programs or get out of the many activities which by their nature should be left to localities.

"But such political realism, if that is what it is, is rapidly running into a political reality. Government today, all down the line, is in crisis. The federal government has paid its way only a few years out of the last thirty; state after state is running out of money and even out of ideas for new tax gouges; and everywhere people are getting fed up with constantly rising

"In that situation something has to give; choices must finally be made. The choice had better not be the counsel of those who say, with little logic and less dignity, that the more Americans there are the more wards of Washington there must be.

"That is a choice for which we may be sure the future population, whatever its size, will not thank us."

—EDITORIAL STATEMENT, The Wall Street Journal.

Electric Power and Civil Defense

By RALPH V. H. WOOD*



No one can provide a perfect blueprint that will assure us of power in case of attack. The Office of Civil and Defense Mobilization has assigned responsibility for electric power in case of national emergency to the Defense Electric Power Administration. Our best bulwark against catastrophic nuclear attack is the electric industry's capacity to plan ahead and ability to get "back into operation" after disaster strikes.

Lenin said, "The closest way to Paris is through Peking." We lost a continent with 600 million people to the hammer and sickle.

The Soviet leaders—they use power and exercise their ambitions. They are not even troubled, as we might be, by the sort of conscience which "doesn't prevent you from doing anything—it just keeps you from enjoying it!"

Training for the nebulous task of longtime survival is a sizable undertaking. Maintaining indefinitely a high state of training and readiness is more difficult.

Today, electric energy is the lifeblood of the industrial might of our nation.

Thus, in the deadly game of survival, the electric power industry plays a vital rôle in meeting the challenge of the Communist bloc

Let us consider, from this angle, electric power as it is today and its long-range prospects. This will include an examination of the ability of the industry to recover from enemy attack, as well as areas that require further study and appraisal.

Russia-United States in the Electric Power Field

The electric power industry recognizes the formidable Russian achievements that have made it the second industrial nation in the world.

The Soviets have a total capacity of 48

^{*}Director of defense, Philadelphia Electric Company. For additional personal note, see "Pages with the Editors."

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million kilowatts for a population of more than 200 million people. We have 150 million kilowatts used by our 175 million people.

While not minimizing their achievement, there is actually more generating capacity under construction for the next three years in this country, than exists in all of Russia.

Russia expects to install 60 million more kilowatts within eight years, while the increase for the United States may be estimated at around 125 million, including industrial plants. Thus by 1965, Russia's ratio could increase to around 40 per cent.

Although no data are available, it seems almost certain that Russian residential use is far less than ours—and presumably the proportion used for the war or defense purposes is much larger than in the United States.

On an overall basis, Soviet output per capita is only one-fourth of that in the United States. Measured by this ratio alone, it is about twenty years behind the United States.

Historically, the Russians have failed to reach their objectives. Conversely, the United States electric power industry shows planning which has been more than substantial in the actual record.

Alexander Pope said, "It is with narrow-minded people as with narrow-necked bottles; the less they have in them, the more noise they make in pouring it out."

1958 and the Future—U. S. Electric Power Industry

ONE of the more noteworthy trends during the 1957-58 recession was the continued orderly progress of the electric power industry. While industrial production, as measured by the Federal Reserve

Board, declined over 19 points, electric production more than held its own.

It requires about three years' "lead time" to get new production facilities ready for use. Thus temporary recessions do not cloud the industry's long-term planning.

Generation by all components, excluding railway and industry, was in excess of 640 billion kilowatt-hours, an increase of more than 10 billion kilowatt-hours over 1957.

Bulking heavily in that record is the constantly increasing residential use per customer, now approximately 3,400 kilowatt-hours. At the beginning of World War II, it was at an annual rate of 1,000 kilowatt-hours. Ten years from now it is expected to more than double today's usage.

The constant increase in the number of customers—last year the industry added another 1 million—is another mainstay.

New electric plant investment approximated one-eighth of all business investment in 1958. Fourteen million kilowatts of new generating became operative, for the largest single annual increase in the industry's history.

Construction by electric companies in 1959 is expected to equal the \$3.8 billion spent in 1958 for new plants and equipment.

Electric power, a growth industry, with considerable insulation from gyrations of the business cycle, is important to investors—of which there are presently nearly 4 million—and to employees and to customers.

Research

As the electric power industry continues to grow, new problems will constantly arise which must be solved by research.

PUBLIC UTILITIES FORTNIGHTLY

If we look to the future, it is most likely that there will be rather radical developments.

New ideas must be introduced so that systems will meet conditions practically and economically. For example, it seems unlikely that the size of generating units and of power plants can economically continue to get bigger and bigger, or that voltage for main transmission can go higher and higher, indefinitely.

Galileo as a boy watched the movement of a lamp which had been set swinging by a gust of wind. The chain by which it was suspended from a high ceiling was of such length that the arcs decreased very slowly. No matter how far the pendulum swung, its movement consumed the same time.

Sixty years later, the old man sat writing a new theory—the regularity of a swinging pendulum might be combined with a spring mechanism to improve the unreliable clocks of that era. He did nothing about it.

A number of years later, just 300 years ago, another man took the notes and invented the pendulum clock.

TODAY, nearly a century does not elapse in the electric power industry between the idea and its application.

Capability and technical skills involved in the conception, design, and development —superior engineering talent working with the equipment and apparatus manufacturers—make for system reliability.

The great strides in productivity and the resultant elevation of living standards are due in no small measure to the use of electric power. The electric industry knows that the nation's survival may well depend upon our industry's continued progress.

Nuclear Power

NUCLEAR power, demonstrated just sixteen years last December in the University of Chicago laboratory, is growing up, but it will take some time to mature. The first practical reactor was in 1953, and power from hydrogen fusion is a future potential.

Construction continues on five major projects in the United States, aggregating 597,000-kilowatt capacity. These will be completed by the end of 1960.

One hundred and thirty-one companies, serving most of the nation's consumers, were participating in one or more of 28 nuclear projects at the end of 1958. This includes 16 announced nuclear power plant construction projects, involving a total utility company investment of more than \$540 million.

Last November, there was formed the largest nuclear power group in the United States, composed of Philadelphia Electric Company and more than fifty other electric utility companies.

The formal proposal filed with the Atomic Energy Commission covers the development and building of a high-temperature, gas-cooled nuclear plant, which will provide a major short cut to the nation's goal of economic nuclear power.

The \$24.5 million, 40,000-kilowatt, prototype plant would be completed in 1962 or early 1963; built, owned, and operated by Philadelphia Electric Company on its property at Beach Bottom, Pennsylvania.

Planning for Catastrophic Disasters

I^N general, this includes the determination of the damage, the man power to make prompt restoration, the tools, equipment, and material required, and getting

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these to the places where needed in the shortest time.

HAT was easily stated, but there are many steps along the way:

- 1. Establish central control where possible.
- 2. Utilization of meteorological warnings and storm tracking.
- 3. Integration of prerecruited volunteers from nonoperating departments for telephone call taking, line patrolling, and other duties such as housing, feeding, and transportation of restoration workers.
- 4. Preparation and issuance of instruction manuals to cover these activi-
- 5. Listing of other companies and contractors with their key people.
- 6. Decentralization and additional field supervision to direct the augmented man power.
- 7. Providing additional transportation, tools, equipment, and materials.
- 8. Advance installation of additional telephones.
- 9. Holding practice drills, with simulated emergency conditions.
- 10. And, finally, keeping the public informed.

The Eastern Seaboard 1958 Snowstorm

Then disaster strikes, it is too late to do the planning, stockpiling, "who will do what, when, and where." Experience then becomes priceless.

The snowstorm which struck the eastern seacoast on March 19, 1958, gave the electric utilities another test of restoration procedures.

Storm tracking, established among companies in the eastern part of the U.S., provided detailed information-wet snow as far south as Virginia and extending to central Maine-transmission and distribution facilities hard hit by the weight of the clinging wet snow and from high winds which snapped poles and wires.

WENTY 110,000- to 220,000-volt lines were down. In some cases this resulted in isolation of generating stations. Damage was twice that of Hurricane Hazel in 1954.

A tremendous job had to be done to restore service.

Regular trained volunteers worked long and hard. These men and women were not doing things on an impulse and on the spur-of-the-moment manner. Their actions were backed by careful planning and much thought.

Helicopters were used for patrolling lines and to bring in men and materials to restore major lines in otherwise inaccessible areas.

Mutual aid plans, in being, enabled 3,-000 workers to be brought in to help in the restoration of 1.6 million customers.

These well-trained outside company crews moved in by airlift. Tree trimmers and electrical contractors were employed. Equipment, properly tailored for the mission, came by roads, as soon as passable. This rapid assembly was accomplished only because of advance plans.

Storm Proofing, an Aftermath

In a few days the catastrophe and its resulting trials and tribulations are soon pushed into the background. That is, except for those in the electric power industry.

EVEN though electric transmission and distribution facilities had been strengthened to withstand another Hurricane Hazel, heavy, wet snow in the March storm represented problems of a sort not heretofore encountered. Analysis of system damage and service interruptions brought out the need for a different type of system-wide storm proofing, the major portion of which will be completed within the next few years. Transmission systems will have reinforcement of steel towers, a change of ground wire assemblies, use of larger diameter ground wire, and installation of sleet melting facilities, particularly in such places as river crossings.

Lines of lower voltage will require not only similar changes, but installation of additional lines and accelerated pole replacement programs. This storm proofing is designed to minimize the effects of the worst storms recorded, to assure customers of greater service reliability. Thus strengthened, such systems will be better able to with-

stand enemy attack.

Planning in a World of Uncertainty

WITH the Communist intent to rule the world, this is a task analogous to preparation for a specific football game and postponing the contest to a day in the indefinite future, to be selected without warning by your opponent! On the other side of the coin, we must not squander our substance in a mad rush "to stop the Commies."

Let us define civil defense as the entire body of emergency actions for which government (federal, state, and local) is responsible, in meeting civilian requirements in the event of disaster including enemy attack. Industry in its turn must utilize all its resources and capabilities to cope with emergency conditions.

The electric power industry, as an industry, probably has done as much detailed hard work on preparing to get back into business after a nuclear attack as any; and has had a wealth of experience through actual battles with the elements. I purposely use the words "back into business" rather than the word "survival." Men and women of the industry are used to doing just that after any disruption.

Organizations differ in what they con-

sider as a standard. In the popular mind, electric service is: You flick the switch, lights come on, wheels turn, and industry comes to life. But it takes more to become a four-star general of industry and a good neighbor; much more than tower lines, enormous generators, gigantic dams, and hydro plants. Battles are fought by men as well as weapons. The determination of men—on the poles, in the boiler room, turbine hall—to do their job despite any hazard, is what will win. They are dedicated and know their jobs. These are an elite group.

Defense and Recuperation Planning

ELECTRIC utility management is actively interested in plant security to protect employees and the properties which produce the lifeblood of the community. The loyalty of all the men and women who make up the employee groups has made security plans effective:

a. To decrease the threat of sabotage by control of admittance to properties—by studies of risks and hazards, to establish the protective measures required, utilizing existing organizations and material through adjustment of

ELECTRIC POWER AND CIVIL DEFENSE

normal peacetime operations.
b. To interchange continually experiences with many companies so as to develop new ideas, and incorporate them in the planning.

The protection of company property against espionage, sabotage, and other malicious damage or destruction is primarily the responsibility of department heads, with the person in direct charge of a property responsible for its security.

Employees, asked to show proof of U. S. citizenship, are photographed and finger-printed, and then receive a tamper-proof identification card which includes their photograph. Personnel employed at operating properties are furnished by the gate guard with a picture badge to be worn in the plant. Guards installed on a 24-hour basis.

Visitors not permitted in operating properties, except those which have a specific interest. Operating men, deputized by state authority, receive continual training in the use of weapons. Areas fenced for employee parking; perimeter lighting and black light installed.

Security plans are tested through the co-operation of the Army, Navy, Coast Guard, FBI, state police, and local police.

MOBILIZATION plans permit management to retain control of an organized force without going through a period of chaos. Separate emergency centers or rendezvous points house assigned management, engineering, load dispatchers, and other departments. All such centers manned during alerts. Thus, key personnel can be located, essential operations started, and communications re-established.

Following an attack, personnel on duty in operations are expected to hold their stations. Personnel not scheduled for reporting and not on duty remain in their homes until advised to report.

Essential drawings duplicated and filed at emergency centers. Other records of great importance are deposited in a relatively safe, but readily accessible, location in the form of microfilm.

EACH building is organized for protection and care of all persons within the building and for the property itself. Plans for feeding and bedding of employees are made and in some locations actual stocks of food maintained.

Periodic check up made of all fire-fighting equipment. Plans for dispersal of designated transportation equipment and major vital materials. Key personnel provided with identification for unmarked automobiles.

Communications strengthened and alternate means established, including two-way radios. Communications teams organized and trained for decentralization. Portable generators in place.

Liaison with Civil Defense to provide technical advice. Liaison personnel report to Civil Defense control centers at all alerts.

The Nevada Atomic Test

WE wanted to find out the effects of an atomic explosion on electric supply systems; the extent of damage in areas beyond the total destruction; the nature of repairs to restore service; and the ability of the electric systems, in comparison with the load served, to withstand an atomic explosion.

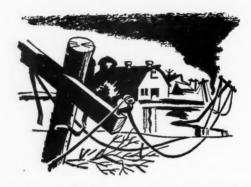
The atomic device was on a 500-foot

steel tower. Identical electric systems, one located one mile and the other two miles from the tower, were erected, tested, and in complete operating condition to simulate service to the buildings in these areas.

The preliminary yield figure was of the

order of 30 kilotons, with damage reaching out for about three miles.

Three hours later, when the radiation intensity at the one-mile line was of the order of 24 milliroentgens per hour, our evaluation team went into the test area.



Bomb Damage No Worse than Windstorms' Effect

AT the one-mile line, gleaming in the early morning sunlight, was our substation steel, standing erect. Nearby were the ripped and crumpled remains of the aboveground portion of a two-story brick house. All damage to the electric utilities at the one-mile installation was moderate, similar to that caused by severe windstorms, and was due to blast and missiles. The identical electric supply system in the two-mile area had no damage, as determined by observation and test. The dwellings at this location suffered severe damage to windows and doors, with some interior damage.

From a radiation hazard point of view, none of the equipment sustained induced radioactivity. The test area was found to be safe enough at that time to have allowed repair crews to enter, and to have remained for a full day's work. No significant damage to electrical equipment occurred from thermal radiation.

The major substation and switchyard equipment, which is the most difficult and time-consuming to repair, suffered relatively little damage in an area where typical urban residential dwellings were severely damaged.

An Atomic Bomb Test Exercise

EXPERIENCE has been gained from several studies of the effects of nominal (20 KT) atomic weapons on major critical areas of electric power sys-

tems. Further knowledge has been gathered from the Nevada atomic test and the recently released book—"The Effects of Nuclear Weapons."

But what would happen if a 15-megaton (equivalent to 15 million tons of TNT) bomb were exploded over the heart of a city with a 2 million population? How much damage would result? How should the electric utility proceed after a calamity of such gigantic proportions? It was decided to find out.

ELECTRIC POWER AND CIVIL DEFENSE

Damaged areas, determined from scaling charts, pointed out that some 1,250,000 people were casualties. All generating stations in the city were gone, but so was the load supplied.

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For the purpose of this test, it was assumed sufficient warning had been given to man the several emergency headquarters some distance in the country. (We recognize that with the advent of the ICBM there may be no warning time.)

In the area within a 4½-mile radius of the blast there was no problem. Death and destruction had removed all need for electric service. A high concentration of deadly radioactive contamination kept out repair crews and shut down additional generating stations through denial of man power.

Normal communications — telephone, commercial radio—were nonexistent. There was no flood of complaint calls!

The immediate task was to marshal all

available forces; move in from the periphery; assess the amount, scope, and relative importance of the damage; make safe that which was dangerous; clear that which constituted an obstruction; and thus restore essential services.

Would there be panic? We do not know. To date there never has been experienced in the United States, an outdoor panic. To be sure, we have had panics indoors.

Defense Electric Power Administration

The federal government is responsible for direction and co-ordination of the total national effort with the Director of the Office of Civil and Defense Mobilization (OCDM) acting for the President. Responsibility for electric power has been delegated by OCDM to the Department of the Interior through a Defense Electric Power Administration (DEPA), with liaison established between the industry and local and state governments and regional OCDM offices.

UNDER emergency or attack conditions DEPA will be the claimant agency for the electric power industry; assign priorities for and make allocation of materials and equipment necessary to maintain an adequate power supply; direct the usage and curtailment of energy; direct as necessary other actions of the electric utilities; perform other delegated responsibilities necessary for the nation's survival and military actions.

DEPA has established 16 field electric power areas, each headed by a federally appointed director and alternates. These areas coincide generally with power pools, already established for efficiency in operating, which join together several electric systems. Often these do not coincide with government boundaries. Mutual aid agreements between companies provide for transfer of large blocks of power, equipment, and man power.

After a surprise attack or declaration of a national emergency, area directors will function as full-time federal employees on the basis of Interior-delegated authority. Delegations go into effect

twenty-four hours after an attack on the United States mainland.

In an attack situation electric power must be supplied to inhabitable areas to keep

those alive that are alive, to the military, and to designated industry.

DEPA shall have full control and use of materials, supplies, equipment, and man power in the possession of utilities at the time of the emergency.

Materials, equipment, and man power not needed for restoring and maintaining essential service will be available for requisition by OCDM echelons.

In the restoration of essential service following an attack, additional materials, equipment, and man power needed will be requested by the local utility from any available source, with assistance if necessary through the area director.

Final Observations

A WEALTH of data on the present status of the industry is available through the Federal Power Commission and the Edison Electric Institute. In this limited space only high lights have been touched.

Inspections by the Department of Defense provide a continuously up-to-date reporting, not only on physical conditions but personnel training. These stimulate interest in plant security but, being realistic, the surveys have not been able to fully strike a responsive chord in all areas. There needs to be developed, among other things, a better motivation—a carrot on the stick—if you will.

As with parents who proudly show off their children, industry is ever anxious to display its new developments ard fine plants. But security-minded managements have to discourage plant visits. This becomes a particularly onerous task when federal agencies, for reasons which to them seem sufficient, are not adverse to visitations which expose properties to fishbowl scrutiny.

The official report on the Nevada test participation, on file with the Atomic Energy Commission, is a story in far greater detail than earlier outlined. It should be studied in broad context with the test reports of other industries.

Of almost equal importance to the test report is a 25-minute color motion picture produced by the electric industry, depicting the electric power portion of the test, and with scenes from other industries to create additional interest. Copies with sound track have been distributed throughout the United States.

THE wheels of our democracy sometimes turn too slowly at this crucial point in history. The DEPA plan already outlined has been in production several years. Just recently the area directors received their formal appointments. The plan lacks status, with only such weight and authority as may be accepted voluntarily.

In this "age of peril," it is recognized that electric power is only one facet of our economy—as it is today, as it projects into the future, and its ability to recover from enemy attack.



"MORALLY, politically, and economically, the supreme issue of the twentieth century is whether the state is to be the master or the servant of its individual citizens. Liberty is integral. One form of freedom begets another, just as tyranny in one field breeds tyranny in others."

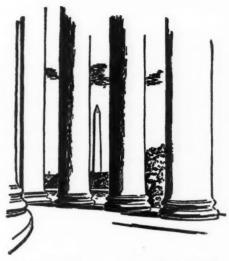
-WILLIAM HENRY CHAMBERLIN, Author and columnist.

Washington and the Utilities

Further FPC Advertising Expense Hearing

THE Federal Power Commission has agreed to direct its examiner to give the electric companies another hearing on the controversial antipublic ownership advertising expense. This came as part of FPC's July 15th order in sustaining its examiner's earlier ruling that the electric utility group could not justify accounting treatment of the costs of certain advertising as operating charges. The FPC examiner has been directed to give the companies another opportunity to present evidence which would show that their advertisements were not political.

FPC rules of accounting specify that the cost of political advertisements must be charged to stockholders as miscellaneous income deductions rather than to customers as operating expenses. The commission's action did not rule, however, on the broad question of whether the utilities' advertising campaign was political. Instead, the ruling merely prohibits, as not being related to the political nature of the advertisements, the presentation of evidence by the private companies of the growth of the government utility threat as a means of



justifying their campaign. The advertising in dispute was part of a 1957 campaign sponsored by "America's Independent Electric Light and Power Companies." The advertisements indicated that public power received tax and other advantages to compete unfairly with private companies.

PC Presiding Examiner Marsh at a hearing last January 6th ruled that evidence offered by the companies should be excluded because it was intended to justify their charging the advertising expenditures to the operating expense account on the basis of the competition existing between publicly owned and privately owned electric power companies. He held that this was contrary to the position of the FPC staff and to decisions of the commission generally that expenditures involving the presentation of argument in matters of political controversy should be accounted for as miscellaneous income deductions rather than as operating expenses.

The FPC issued an order on August 1, 1958, questioning the treatment accorded by 76 electric utilities for the cost of nine of the 26 advertisements involved in the

1957 ECAP program. After prehearing conferences, hearings got under way on January 6th, at which Examiner Marsh made his ruling excluding the evidence. The companies then appealed to the commission, which heard oral argument February 26th.

The FPC said that with one exception, the nine questioned advertisements "appear on their face to involve the presentation of argument in matters of political controversy, have as their primary purpose the influencing of public opinion as to proposed legislation or the repeal of existing laws, and have a direct relationship to political matters." The FPC added that in its judgment the evidence thus far proffered was "without probative value to show the contrary with respect to any of these advertisements." Even if the evidence were admissible because of its relevance to the issue of whether the questioned advertisements are political or nonpolitical in character, the FPC said, it is "without weight to prove that these advertisements are in fact nonpolitical."

THE companies argued that the expenditures were ordinary, necessary, just, and reasonable in the operation of their businesses and were intended to promote the sale of electricity and enhance their credit standing. They also contended that a requirement classifying the expenditures below the line would violate a section of the Federal Power Act providing for proceedings in which accounting entries questioned by the commission may be justified. A further argument by the companies was that their right of free speech would be violated.

Declaring that there was no question of any violation of any right of free speech, the FPC said that the companies are free to make these advertising expenditures. A requirement that they be paid for by the stockholders rather than the ratepayer would not constitute any violation of the First Amendment, the commission asserted. Noting that some of the companies have indicated that they may want to present other types of evidence which they deem material and relevant to show the nonpolitical character of the advertisements, the commission said it was returning the case to the presiding examiner for further proceedings consistent with its ruling. The FPC's order directs the examiner to reconvene the hearing at a time "most convenient to those concerned."

OMMISSIONERS John B. Hussey and Arthur Kline each filed a separate concurring opinion. Commissioner Hussey indicated that when there is actual competition, it is proper for the privately owned companies to use advertising to call public attention to a tax burden borne by them from which publicly owned companies are exempt. However, he said, some of the advertisements involved in these proceedings go beyond the function of public education and ask why something is not done about this inequity. When remedial action is called for and the only such action possible would be enactment. amendments, or repeal of laws, the remedial action sought would necessarily be political in nature, he asserted. There is a serious question, he continued, as to whether this call for remedial political action would not, by its nature, render the advertisements political in character.

Testimony showing that actual and real competition exists between certain privately owned and publicly owned utilities and that advertising by the private companies seeking to establish good will or to secure patronage from other taxpayers on the grounds that the privately owned utilities bear their respective share of the country's tax burdens would be admissible, Commis-

WASHINGTON AND THE UTILITIES

sioner Hussey said. However, he continued, the offer of proof indicates that the proffered evidence would reopen the private versus public power battle. The basic philosophies underlying private versus public ownership are matters which would more properly be directed to the Congress, he said, adding that its introduction into these proceedings would only serve to emphasize the "political" nature of the advertisements calling for remedial action.

OMMISSIONER Kline said that in view of the fact that the proceeding deals only with the classification of certain expenditures for accounting purposes, he concurred with the majority that the proffered evidence should be excluded. He said his separate statement was necessary because the majority observed that there was no merit to the companies' contention that these expenditures were ordinary and necessary in the operation of their businesses-"the very issue on which it denies them the right to introduce evidence." Much of the proffered evidence is directed to the issue of whether these expenditures were proper and necessary, he added, "and if we are to decide the case on this issue. then we should first receive and consider such portions of the proffered evidence as are relevant and material to this issue as otherwise respondents would be denied due process."

TVA and Public Works

THE possibility that President Eisenhower will veto both the TVA financing bill (HR 3460) and the public works bill (HR 7509) is gaining ground. The President has made his objections to these two bills known through letters to Republican congressional leaders and through press statements. The House Rules Committee granted a rule on the

TVA bill which cleared the way for the House to accept the Senate bill, thereby avoiding the need for a conference. Earlier House Minority Leader Halleck (Republican, Indiana) had blocked a move to have the amended bill brought up under a unanimous consent agreement.

Objections to the lack of budget controls even though token controls are included in the Senate amendments to the House bill have been expressed by President Eisenhower. When the bill was called up before the House, that body readily agreed to the Senate amendments. Despite the easy passage of the Senate bill through the House, there is expectation that the President will veto the bill and his veto will be sustained. It has been shown that the Democratic majority does not have enough strength to override such presidential action.

A House-Senate conference was working on the public works bill. The House version of the bill included 44 new projects at a cost of more than \$500 million, and the Senate amended this to include 38 additional projects at a cost of more than \$700 million. The conferees are attempting to resolve the differences and they also are taking into consideration the President's strong warnings against excessive spending and violating his "no new starts policy."

President Eisenhower in a letter to Representative Taber (Republican, New York), ranking minority member of the Appropriations Committee, warned that he would veto the bill should he consider the spending proposals excessive. The President pointed out that should the appropriations bill include all the new projects, it would become necessary in 1961 to appropriate an additional \$200 million in order to keep these projects under way.

The Senate version included an ap-

propriation for \$100,000 to begin investigations of the huge Rampart Canyon hydroelectric project in Alaska. If the President vetoes the bill, Democratic strategy is to go before the voters in 1960 and point out what the majority tried to do for various areas, only to be frustrated by Ike's veto. It seemed unlikely that all 82 new projects would be eliminated. Just how much President Eisenhower might be willing to compromise on this point remains to be seen. His strong statements lead many to believe that only a bill which adheres to the administration's budget request will be finally acceptable.

Burns Creek Reservoir Passes Senate

The Senate last month quickly passed S 281 which would authorize construction of a reregulating reservoir and dam at the Burns Creek site in the Upper Snake river valley, Idaho, despite strenuous opposition of some Senators. Leading opponent of the measure was Senator Goldwater (Republican, Arizona), who charged that the Burns Creek dam was not a true reclamation project because more than 98 per cent of its benefits would be to produce power. Not only was the power not needed, he said, but the Utah Power & Light Company is building a 300,000-kilowatt generating plant.

Senator Dirksen (Republican, Illinois), minority leader, stated that in view of the facts presented he could not give his approval to the bill. Proponents of the measure contended that the irrigation benefits were in the nature of an insurance policy against water shortage and would justify the \$45 million needed to build the dam over a period of time. Senators Anderson (Democrat, New Mexico) and Morse (Democrat, Oregon) supported it.

REA Independence Sought

Secretary of Agriculture Benson still wants Rural Electrification Administration co-operatives to pay more interest and work towards more financial independence from the federal government. This, despite widespread opposition among Democrats, and some Republicans, in Congress to any further rise in REA interest and against the formation of a co-operative-owned bank which Benson earlier urged to handle their own financing.

Benson proposed that the current 2 per cent interest be boosted to a rate high enough to cover the government's own cost of borrowing the money. He noted the government has been paying more than 4 per cent interest. "I am certain that the majority of the directors, managers, and members of rural electric co-operatives want to stand on their own feet," Benson said. "They do not want to depend on government support."

Secretary Benson told the annual meeting of the Virginia Association of Electric Co-operatives, meeting in Roanoke, Virginia, last month, that "well-meaning friends" had advised him not to bring up his controversial interest proposal, which has drawn criticism previously. "But I believe you want me to tell you the truth as I see it and I intend to do so," Benson said. He added:

REA and the rural electric co-operatives have now come of age. You are strong enough and mature enough, in the main, to stand more on your own feet.

In addition to the plan to boost REA interest rates, Benson repeated an earlier proposal that farm credit co-operatives be set up to supply the money needed by the electric co-operatives.

Telephone and Telegraph

Bell Telephone Ordered To Cut Rates

THE Federal Communications Commission has ordered the Bell Telephone system to cut its rates on long-distance telephone calls by about \$50 million annually, effective the mid-part of this September. The FCC order will apply to calls of more than 300 miles distance between states. The commission has no jurisdiction over rates on calls within a state. The specific rate reductions involved have not been announced; however, they will be revealed in the near future.

Shortly after the FCC announcement, Frederick R. Kappel, president of the American Telephone and Telegraph Company, stated that AT&T is being penalized "because it has good research and good management." The FCC stated that its order was a result of the continuing review of interstate operations of the Bell system. The commission also stated that it plans to continue its inquiries into interstate long-distance rates and it intends to observe the effects of the new rate order on the Bell system's earnings.

The last rate change on long-distance telephone calls occurred in October of 1953 when the FCC permitted an 8 per cent increase in rates.



Lack of FCC Community, TV Rules Noted

THE Federal Communications Commission has been accused of shirking its duty in connection with relay television. Senator McGee (Democrat, Wyoming) leveled the charge during an Interstate Commerce Subcommittee hearing on the regulation of community antenna TV (CATV) stations and booster TV operators.

The chairman of the FCC, John C. Doerfer, told the Senator he opposed commission control of CATV systems because he did not think that such control was within the agency's jurisdiction. Senator McGee then accused the commission of making paper decisions in refusing to take jurisdiction or to exercise controls over TV when no hearings have been held. This Chairman Doerfer denied and he pointed out that industry comments had been invited and that the conclusions reached had been made on that basis. Senator McGee has introduced two bills which would put community TV systems under the regulation of the Federal Communications Commission. Hearings on these bills have been completed and it is anticipated that some definite form of legislation will be forthcoming soon as a result.

Another measure (S 1886), proposed by Senator Moss (Democrat, Utah), asks that both booster TV stations and CATV systems be brought under the jurisdiction of the FCC. This bill, however, contains one provision which the FCC has objected to. It would require the commission to ascertain whether a booster or CATV station would adversely affect a local TV station's operation. FCC declares that it would be difficult to make such a determination and that it might be unwise to deprive the public of a choice of multiple stations.

S 2303, introduced by Senator Monroney (Democrat, Oklahoma), would require the licensing of CATV operators. However, no licensing would be needed for extension of lines within the operating territory of an existing CATV installation.

REA Organization Changes

THE Department of Agriculture has announced that the Rural Electrification Administration is making changes in organization and personnel assignments in the section of the REA devoted to telephone matters.

Effective August 17th, the telephone engineering division and the telephone operations and loans division will be abolished. In their place will be five telephone area offices. These area offices will be organized on a geographical basis and each office will be under the direct supervision of an area director. The area director will be responsible for all REA activities in the telephone program—loans, engineering, accounting, and management.

The objective of the reorganization is to improve co-ordination of activities with borrowers and to center in each area a director who is responsible for carrying out all phases of the program. Each of the area offices will include an engineer-

ing section and an operations section. The area offices, the states they include. and the assigned directors are the following: Northeast Area Office, Thomas I. McDonald, director, Maine, Vermont, New Hampshire, Massachusetts, Connecticut, New York, Pennsylvania, Rhode Island, Delaware, Maryland, Virginia, West Virginia, North Carolina, Michigan, Indiana, Ohio, New Jersey; Southeast Area Office, Walter L. Wolff, director, Kentucky, Tennessee, Mississippi, Alabama, Georgia, South Carolina, Florida, Virgin Islands, Puerto Rico; North Central Area Office, Edgar F. Renshaw, director, North Dakota, South Dakota, Minnesota, Wisconsin, Iowa, Illinois; Southwest Area Office, Edward Maddox, director, Arizona, New Mexico, Texas, Oklahoma, Missouri, Arkansas, Louisiana; Western Area Office, William W. Newman, Jr., director, Nebraska, Kansas, Colorado, Wyoming, Montana, Washington, Oregon, Idaho, Utah, California, Nevada, Alaska, Hawaii, Pacific possessions.

Bell's Push-button Telephone

THE Bell Laboratories are now testing an experimental push-button telephone set which would replace the conventional rotary dial model. The push-button telephone consists of 10 buttons arranged in three horizontal rows of three each—plus a zero-operator button. It is hoped that the model will increase speed and accuracy and that it will gain customer preference. Should the model live up to Bell Laboratories' expectations, it may be installed generally.

Radio-TV Equal Time

The House Interstate Commerce Committee has favorably reported

TELEPHONE AND TELEGRAPH

Chairman Oren Harris' bill (HR 7985) which would amend the Federal Communications Act with respect to the "equal time" provision. The bill exempts political candidates from the "equal time" provision when they appear on a bona fide radio or television newscast or program of a news type. The Harris Bill also exempts a "legally qualified candidate" who appears on spot coverage news events, such as political conventions. Chairman Harris said that the vote to favorably report the legislation was "almost unanimous."

It is anticipated that the House will consider this legislation in the not too distant future.

Tunnel Diode Announced By General Electric

SCIENTISTS of the General Electric Company have demonstrated a new device which may be the most important achievement in the field of electronics since the advent of transistors.

The tunnel diode is a device for controlling the flow of electrons and it would perform the same job as vacuum tubes or transistors. The new device consists of a wire leading to an alloy which is affixed to a germanium crystal. On top of this unit is a metal plate. The electrons jump from one side of a junction to another with the speed of light, making the device as fast acting as is physically possible. In addition, only about one one-hundredth as much power is needed to operate the diode.

Vacuum tubes, transistors, and the new tunnel diode are used as oscillators or amplifiers in electrical circuits, through the control of electron flow. The vacuum tube utilizes the principle that electrons boil off a hot filament. These then pass through a grid that controls their flow and they strike against another filament to complete the circuit. Transistors function by controlling the flow of free electrons through a semiconductor such as germanium.

The new tunnel diode is far less sensitive to temperature changes and atomic radiation than are vacuum tubes and transistors. It is hoped that it will prove of value in nuclear reactors, space vehicles, and communications systems.

Educational TV

LEONARD PRESS, head of the department of radio arts at the University of Kentucky, has proposed a Kentucky-wide educational TV network. Mr. Press said that the need for such a network is based on growing college enrollments and the shortage of qualified instructors.

The network envisioned by Mr. Press would include three steps: (1) the establishing of a television-production and training center at the University; (2) an interconnecting TV system linking the university to extension centers; (3) an interconnecting TV system linking the extension centers with the university.

Should this system be developed resident teachers on the university staff would have the opportunity to lecture to the extension centers all over the state. Mr. Press predicted that Congress will provide grants for states to develop educational TV and that groups such as the Ford Foundation would aid the project.



Financial News and Comment

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By OWEN ELY

Is the Stock Market Reaching Dangerous Levels?

For a long time many observers have felt that the stock market has gotten into dangerously high ground, and yet the market has continued for about fifteen months to advance almost steadily—without the customary 10 per cent "intermediate reactions" which have characterized earlier bull markets. In these earlier periods of advance the months of August-November have frequently proven vulnerable—will history repeat itself this year?

The steel strike has had little disturbing effect on the market thus far. The old adage "never sell on strike news" is now well-known to the American public. Moreover, this has been one of the best discounted strikes on record, substantial inventories of steel products, cars, etc., having been built up. In fact, to have it settled quickly would perhaps prove embarrassing to users of steel, who have "dug in" for a strike of two or three months' duration.

The real issue in this strike seems to be "featherbedding," which first gained a foothold in the railroad industry and has gradually permeated many other lines of industrial activity, including steel. Roger Blough, chairman of United States Steel, has determined to make a firm stand at this time over labor's "creeping inefficiency," combined with the "creeping inflation" of regular annual wage increases and higher fringe benefits. He has gained the administration's support on the inflation issue and doubtless further research is being done on the question of productivity.

While labor in this country has not openly opposed automation as stubbornly as British labor has, it has reduced its benefits by cutting down on its own contribution to productivity—despite the fact that it claims to be contributing heavily to increased output per man-hour. Some recognition of, and adjustment for, this condition would permit the steelworkers to get some increase in wages, but it may take a few weeks for them to "see the light." Fortunately, the utility industry

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seems less affected by the disease of labor malingering than most other industries.

Turning again to the stock market: The phenomenal rise in prices of about 60 per cent, following the substantial decline in 1957, has been based (as always) on two factors: (a) increased share earnings, both actual and projected; and (b) an increase in the price-earnings vardstick for the more popular groups of stocks. (This would probably not be true for groups which are temporarily unpopular, such as oils, coppers, etc.) As in all major bull markets, the idea of capitalizing future growth and potential capital gains has seized the popular imagination. However, according to projected annual earnings on the stocks included in Barron's 50-stock average, present projected earnings are \$18.60 a share compared with \$13.04 a year ago, an increase of 36 per cent-and the price-earnings ratio for this group of stocks is reported as only 15.3 compared with last year's 16.1 To the extent that these figures are representative of the general market, the rise would seem to have a fairly solid foundation.

HERE is little doubt that the missionary work done by the New York Stock Exchange in recent years in favor of a "People's Capitalism" has borne fruit. Many new investors are constantly entering the market, attracted by the uninterrupted rise and intrigued by the usual tips and recommendations regarding individual growth issues. Yields are largely ignored, except where needed to meet living expenses, since the philosophy is becoming more widespread that eventual capital gains are a sound substitute for current income. Diversion of funds from stocks to bonds on any substantial scale will apparently have to await an improved outlook for the bond market.

In the 1929 bull market the stocks of

utility holding companies were the prime favorites and sold at multiples of perhaps 30 to 100 times earnings. Now utility stocks are playing a more modest rôle with P-E ratios of about 14-30. (Florida Power & Light was recently at the latter figure.) In the present market the electronics stocks are the glamorous group, with ratios frequently running from 25 to 60 or 70 times reported earnings, based on the ultra-rapid growth characteristics of some of these stocks, many of which are unlisted. Unfortunately, many small companies may fall by the wayside or be absorbed, as their products are superseded by new miracle projects of other companies.

THILE utility stocks declined for several months earlier this year, due to talk of high money rates and adverse regulation for pipelines, since June they have shown a considerable recovery and some of the growth stocks have gone into new high ground. There is now, perhaps, greater realization than in the past of the fact that while utility stock yields may average about one per cent less than bond vields, this is largely justified by improved regulatory conditions (on balance), the defensive character of utility stocks during recessions (as proven last year), and continued prospects for dividend increases even in ultraconservative stocks like American Telephone and Telegraph. This "premium" over bonds will, of course, disappear in the future if the industry should encounter hard times, such as (a) failure to obtain rate increases from state commissions where needed, (b) a business setback of deeper proportions than the three postwar "recessions," or (c) development of revolutionary devices which might threaten the present utility setup for servicing customers.

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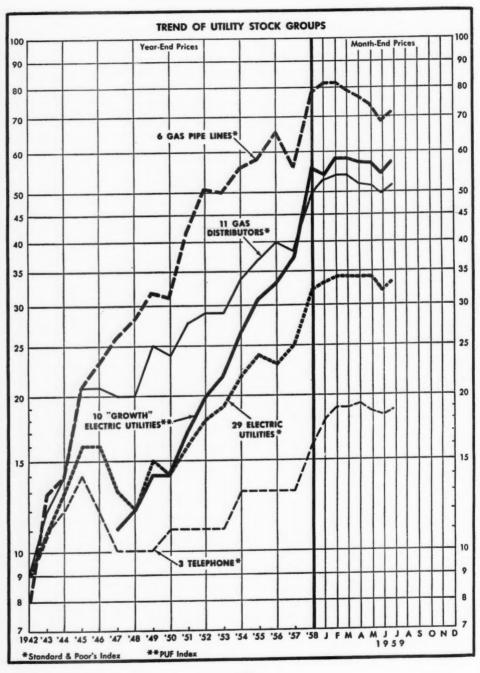
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FINANCIAL NEWS AND COMMENT

early in the century were considered growth companies—both New Haven Railroad and Interboro Rapid Transit at one time sold over \$200 a share, this writer recalls. But the development of the automobile and airplane caused these companies to lose their monopoly character; despite apparent regulatory guaranties that they would be allowed to earn a living, competition has played havoc with their earnings in many cases. Let us hope that such a contingency will never arise for the electric utilities.

Average Cost of Senior Capital 5.16 Per Cent in June versus 4.45 Per Cent Year Ago

THE prevailing yields on outstanding utility bonds (as shown in the accompanying table "Yield Yardsticks") do not represent the real cost of new money to the utilities. In the first place, during periods when money is relatively tight yields on new offerings tend to show a spread over those on outstanding issues. In June, for example, eight new offerings showed an average yield of 5.02 per cent while the average yield for securities of similar quality (as indicated by the Moody ratings) was 4.79 per cent, making a differential of .23 per cent or an increase of nearly 5 per cent in cost.

Also, the yields on the offering prices

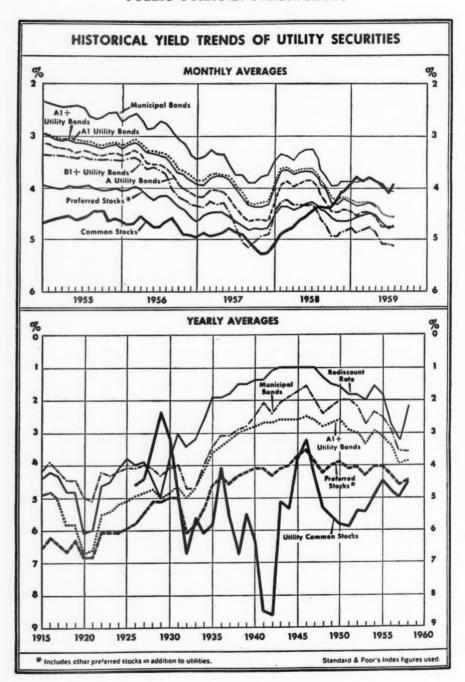
of new securities do not fully reflect the net cost to the utilities. The underwriters' commissions and the estimated expenses (preparation and printing of the prospectus, legal fees, etc.) may cost as much as 1 to 7 per cent of the offering price, depending largely on the size of the issue.

EBASCO SERVICES has for many years kept a detailed record of public utility financing, issuing quarterly and annual bulletins on a subscription basis. Based on Ebasco figures we estimate the net cost of 46 bond offerings in the first quarter at 4.94 per cent, and in the second quarter 33 offerings averaged a net cost of 4.96 per cent. In the first quarter 14 preferred stocks showed an average net cost of 5.50 per cent and in the second quarter 5.41 per cent. Based on the usual "weights" of 50 per cent for funded debt and 15 per cent for preferred stock (as percentages of total capital) this would mean an average cost for all senior money of 5.06 per cent in the second quarter. In the month of June the average approximated 5.16 per cent compared with 4.45 per cent in June, 1958. Such a cost level for senior financing seems out of line with the traditional 6 per cent "fair return" concept, which has to cover the normal cost of equity financing as well as that of senior money. (Currently, the cost of equity money is probably below normal.)

CURRENT YIELD YARDSTICKS (Standard & Poor's Indexes)

	July 22, 1959	1958-59 Range High Low	1957 Range High Low
Utility Bonds—A1+	4.57%	4.59% -3.58%	4.38% -3.70%
—A1		4.64 - 3.61	4.41 —3.73
-A	4.75	4.78 - 3.85	4.70 —3.96
-B1+	5.11	5.13 -4.20	5.21 - 4.21
Preferred Stocks*	4.71	4.81 —4.26	4.86 -4.42
Utility Common Stocks	3.89	4.98 —3.71	5.44 —4.73

^{*}Twelve industrial and two utility issues (high-grade).



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FINANCIAL NEWS AND COMMENT

During the "cheap money" period of the 1940's the cost of senior financing probably averaged around 3.5 per cent (see chart page 292), but since 1950 the cost has been rising and is now at about the highest level (except perhaps for a brief period two years ago) since the early 1930's.

In the 1957 period of tight money, the Federal Reserve Board "put on the brakes" because it felt that business activity was rising too fast; later in the year it reversed its position and the money stringency was eased. This year, however, there is no indication as yet that the Reserve will modify its tight money policy. The national campaign against inflation, spearheaded by the White House itself, has gathered considerable momentum. FRB Chairman Martin is strongly opposed to the proposed congressional legislation containing a statement that "it is the sense of Congress" that the Federal Reserve should buy bonds, and it is reported that the President has supported his view despite the fact that this might endanger passage of the bill to permit raising the interest rate on government long-term issues from the present 41 per cent limit. Accordingly, if the bill does not pass, the Treasury will be virtually limited to short-term "roll-over" financing, and the Fed's tight money policy will

doubtless continue even if it penalizes the Treasury Department. While the FRB is supposed to follow a policy which will help employment, the record June employment figure of 67.3 million (with unemployment at 4 million) obviously has no inhibiting influence on the board's money policy.

With the gross national product up to \$482 billion (indicated rate), the supply of investment funds may improve somewhat, and as the usual summer letdown in new financing begins the bond market is showing signs of stability. What will happen in the fall, with the steel strike over and business again in high gear, is another question.

What Factors Make Utility Stocks Popular?

THE annual statistical bulletin on "Electric Utility Companies in Regional Groupings," prepared by Carl M. Loeb, Rhoades & Company, permits a comparison to be made for certain key ratios on an area basis. These ratios average as follows for 97 utilities:

	Growth						
(five	years)		 		 		6.2%*
	on Investra I Pay-out						
Price-ea	rnings Ra	tio .	 	 	 		17.7%

^{*}Compounded.

^{**}On midyear rate base—the return would be lower on a year-end rate base.

	Average Growth of Share	Return on	Dividend	Average Of 3	P-E
Territory	Earns.	Investment	Pay-out	Factors	Ratio
I. New England	60%	94%	111%	88%	90%
II. Middle Atlantic	102	95	103	100	100
III. Central Industrial	83	103	104	97	95
IV. West Central	65	102	101	89	90
V. Southeast	173	106	86	122	116
VI. South Central	118	111	96	108	121
VII. Rocky Mountain	143	102	89	111	108
VIII. Pacific Northwest	110	94	104	102	96
IX. Pacific Southwest	92	89	97	93	96
U. S. Average	100%	100%	100%	100%	100%

The first three items are considered to be most important factors in the price-earnings ratio—which, in turn, governs the cost of equity financing. In the table on page 293 the averages for the utilities in each area have been reduced to percentages of the national averages. The first three columns show the popularity factors, the fourth column is an average of the three, and the fifth column the price-earnings ratio.

It is interesting to study the last two columns and find the degree of correlation. This is fairly close except in the Southeast, South Central, and Pacific Northwest areas.

THE greatest discrepancy is in the South Central area where the average price-earnings ratio is 21 per cent above

the national average (21.5 versus 17.7) while the average of the three key factors is only 8 per cent above the U. S. average. Probably this results from the fact that this area includes the Texas growth utilities and dividend pay-out is a less important consideration in the case of these stocks; omitting the pay-out would bring the average of the remaining two factors up to 115, fairly well in line with the P-E ratio percentage.

These comparisons might be refined by assigning various weights to the three factors and allowing for other conditions, but this must await further study of the statistics. In any event, the evidence seems clear that these are the more important factors in the minds of investors and purchasers of electric utility shares, in determining the prices they are willing to pay in relation to earnings.

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RECENT FINANCIAL DATA ON GAS UTILITY STOCKS

\$ 5 O AlaTenn. Nat. Gas 24 \$1.20(k) 5.0% \$1.40Ma 3% 14% 17.2 86% 40% 205 S American Nat. Gas 61 2.60(L)4.3 4.31Ma 4 8 14.2 60 39 76 A Arkansas Louis. Gas 68 1.20 1.8 2.82Ma 50 85 24.1 43 53 55 O Colo. Interstate Gas 47 1.25 2.7 2.51Ma NC 9 18.7 50 24 427 S Columbia Gas System 21 1.00 4.8 1.41Ma 1 26 14.9 71 43 70 Commonwealth Gas 8 — — 49De 22 — 16.3 — 77 19 O Commonwealth N. G 22 1.00 4.5 1.63Ma 2 12 13.5 61 47 11 S Consol. Gas Util 19 90 4.7 1.60Ap 3 8 11.9 56 57 304 S Consol. Nat. Gas 49 2.10 4.3 3.45Ma D3 11 14.2 61 60 19 O E. Tenn. Nat. Gas 11 60 5.5 89Ma D4 23 12.4 67 25 368 S El Paso Nat. Gas 32 1.30 4.1 1.61De D2 — 20.0 81 17 50 S Equitable Gas 38 1.60 4.2 2.58Ma 16 6 14.7 62 44 34 O Houston N. G 29 80 2.7 1.44Ap D23 11 20.1 56 18 21 O Kansas Nebr. Nat. Gas 42 1.80(f) 4.3 2.94De 15 11 14.3 61 36 113 S Lone Star Gas 42 1.80(f) 4.3 2.94De 15 11 14.3 61 36 113 S Lone Star Gas 42 1.80 4.3 2.24De D4 10 18.8 80 43 77 S Miss, River Fuel 36 1.60 4.4 2.08Ma NC 5 17.3 77 48 28 S Montana Dakota Util 30 1.00 3.3 1.76Ma 14 15 17.0 57 29 29 60 Mountain Fuel Supply 26 1.20 4.6 1.57De D9 3 16.6 76 51 194 S Natl. Fuel Gas 23 1.15 5.0 1.81Ma 30 7 12.7 64 56 139 S Northern Nat. Gas 29 1.24 4.3 1.92Ap 23 6 15.1 65 34 121 S Panhandle East. P. L 48 1.80 3.7 2.74De 2 17.5 66 40 15 O Pennsylvania Gas 24 1.20 5.0 2.13De D2 30 11.3 56 59 188 S Peoples G. L. & Coke 60 2.00 3.3 3.89Ma 9 4 15.4 51 41 26 O Pennsylvania Gas 24 1.20 5.0 2.13De D2 30 11.3 56 59 188 S Peoples G. L. & Coke 60 2.00 3.3 3.89Ma 9 4 15.4 51 41 26 O Pennsylvania Gas 24 1.20 5.0 2.13De D2 30 11.3 56 59 188 S Peoples G. L. & Coke 60 2.00 3.3 3.89Ma 9 4 15.4 51 41 26 O Pennsylvania Gas 24 1.20 5.0 2.13De D2 30 11.3 56 59 188 S Peoples G. L. & Coke 60 2.00 3.3 3.89Ma 9 4 15.4 51 41 26 O Pennsylvania Gas 24 1.20 5.0 2.13De D2 30 11.3 56 59 188 S Peoples G. L. & Coke 60 2.00 3.3 3.89Ma 9 4 15.4 51 41 26 O Pennsyl	Annu Ret (Mil	7.		7/22/59 Price About	Divi- dend Rate	Approx. Yield	Recent Share Earnings	% In-	Aver. Incr. In Sh. Earn. 1953-58	Price- Earns. Ratio	Div. Pay- out	Approx. Common Stock Equity
205 S American Nat, Gas 61			Pipelines and Integrated S	ystems								
	205 76 55 427 7 19 11 304 19 368 50 34 21 113 77 28 26 94 43 121 15 188 26	SAOSOOSSOSSOSSOSSOSSOS	AlaTenn. Nat. Gas American Nat. Gas American Nat. Gas Arkansas Louis. Gas Colo. Interstate Gas Colo. Interstate Gas Colombia Gas System Commonwealth Gas Commonwealth N. G. Consol. Gas Util. Consol. Nat. Gas E. Tenn. Nat. Gas E. Tenn. Nat. Gas E. Tenso Nat. Gas Equitable Gas Houston N. G. Kansas Nebr. Nat. Gas Lone Star Gas Miss, River Fuel Montana Dakota Util. Mountain Fuel Supply Natl. Fuel Gas Northern Nat. Gas Panhandle East. P. L. Pennsylvania Gas Peoples G. L. & Coke Pioneer Nat. Gas	24 61 68 47 21 8 22 19 49 11 32 38 29 42 42 36 30 26 23 30 29 48 24 60 39	\$1.20 (k 2.60 (I 1.20 1.20 1.00 1.00 1.00 2.10 .60 .80 1.80 (f 1.80 (f 1.20 1.15 1.40 1.20 1.20 1.24 1.80 1.20 1.40	1.8 2.7 4.8 4.5 4.7 4.3 5.5 4.2 2.7 4.3 4.4 3.3 4.4 3.3 4.6 5.0 4.7 4.3 3.7 5.0 3.3 3.6	4.31 Ma 2.82 Ma 2.51 Ma 1.41 Ma .49 De 1.63 Ma 1.60 Ap 3.45 Ma .89 Ma 1.61 De 2.58 Ma 1.44 Ap 2.94 De 2.24 De 2.08 Ma 1.76 Ma 1.57 De 1.81 Ma 1.62 Ma 1.92 Ap 2.74 De 2.13 De 3.89 Ma 2.10 De	4 50 NC 1 22 3 D3 D4 D2 16 D23 15 D4 NC 14 D9 30 D5 23 D2 23 D3	8 9 26 —12 8 11 23 —6 11 11 10 5 15 3 7 9 6 2 30 4 11	14.2 24.1 18.7 14.9 16.3 13.5 11.9 14.2 12.4 20.0 14.7 20.1 14.8 17.3 17.0 16.6 12.7 18.5 15.1 17.5 11.3 15.4 18.6	60 43 50 71 61 56 61 67 81 62 56 61 80 77 76 64 86 65 66 51 67	39 53 43 77 47 57 60 25 17 44 18 36 43 48 29 51 56 35 40 59 41 43

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Annu Ret (Mil. 402 266 104 115 318	7.	(Continued) Tenn. Gas Trans. Texas East, Trans. Texas Gas Trans. Transcont. Gas P. L. United Gas Corp.	7/22/59 Price About 34 30 28 22 37	Dividend Rate 1.40 1.40 1.20(b) 1.00(b)	4.5	Recent Share Earnings 1.61Ma 2.05Ma 2.06Ma 1.47Ap 2.39Ma	% Increase D8 D23 9 NC D5	Aver. Incr. In Sh. Earn. 1953-58 16 16 3 17 4	21.1 14.6 13.6 14.9 15.5	Div. Pay- out 87 68 58 68	Approx. Common Stock Equity 21 21 33 23 42
		Averages			4.3%		3%	12%	16.4	67%	
32 53 3 7 6 7 9 41 13 6 6 8 9 3 2 0 18 18 18 19 10 10 10 10 10 10 10 10 10 10	S00A0S00000000000000000000000000000000	Retail Distributors Alabama Gas	32 38 20 32 19 54 21 15 6 31 46 27 25 21 24 31 26 26 38 47 30 12 17 52 36 17 11 45 15 55 17 11 15 15 17 18 18 18 18 18 18 18 18 18 18 18 18 18	\$1.60 1.80 1.00 1.60 1.00 2.20 1.00 .80 .35 1.52 2.00 1.40 1.00(b) 90 1.05 1.50 1.20 1.10 1.90 1.80 1.00 .60 .72 2.40 1.00 .75 .56 .16 .80 .90 2.40 2.24 (g) .60(i)	5.0% 4.7 5.0 5.3 4.1 4.8 5.3 5.8 4.9 4.3 5.2	\$2.02My 2.47My 1.42F 2.68Ma 1.30De 3.36Ma 1.69Ma .84Ma .84F 2.48Je 2.45Je 2.19My 1.24Ma 1.48Ma 2.04Ma 2.23Ma 1.31Ma 3.07De 2.81Ma 1.72My 4.12Ma 2.80Ma 1.59Ma 2.80Ma 1.59Ma 2.81De 4.12Se 1.2Se 1.25Ma 3.37Ma 4.22Ma 1.03Ma 1.03Ma 1.25De	NC D24% 18 40 10 5 3 D24 D31 D13 16 15 D3 D10 8 5 1 D30 4 12 4 6 6 5 D23 128 20 40 40 27 15 21 38 91 42	13% 11 31x 8 28 10 11 17 17x 13 — 14 11 5 4 6 8 7 13 — 12	15.8 15.4 14.1 11.9 14.6 16.1 12.4 17.9 15.8 20.0 12.3 16.6 16.9 16.2 11.6 19.8 12.4 14.8 *15.2 18.3 17.4 18.3 13.2 20.0 16.3 17.4 18.3 13.2 20.0 12.3 20.0 12.3 20.0 12.3 20.0 12.3 20.0 12.3 13.4 14.8	79% 74 71 60 77 65 95 92 64 82 64 66 73 71 74 84 84 62 93 47 76 77 74 84 84 84 84 84 84 84 84 84 84 84 84 84	42% 34 39 46 46 417 57 436 51 531 534 34 34 37 636 42 227 50 552 50 543 40 40 40 40 40 40 40 40 40 40 40 40 40
		Averages		3	4.5%		14%	11%	15.4	68%	

RECENT FINANCIAL DATA ON TELEPHONE, TRANSIT, AND WATER STOCKS

Annual Rev. (Mill.)			7/22/59 Price About	Divi- dend Rate	Approx. Yield	Recent Share Earnings	% In-	Aver. Incr. In Sh. Earn. 1953-58	Price- Earns. Ratio	Div. Pay- out	Approx. Common Stock Equity
		Communications Bell System									
\$6,771	S	Amer. T. & T. (Cons.)	81	\$3.30	4.1%	*\$4.94Mv	12%	4%	*16.4	67%	64%
329	A	Bell Tel, of Canada	45	2.00	4.4	2.14De	7	-	21.0	93	64
47	0	Cin. & Sub. Bell Tel	91	4.50	4.9	5.15De	5 7	$\overline{}$	17.7	88	76
255	A	Mountain Sts. T. & T		6.60	3.8	9.55My	7	4	18.2	69	76
354	A	New Eng. T. & T		8.00	4.0	10.23Ma	25	7	19.6	78	62
937	S	Pacific T. & T	185	7.00	3.8	9.06My	20	1	20.4	77	61
119	0	So. New Eng. Tel	46	2.20	4.8	2.75Je	13	8	16.7	80	61
		Averages			4.3%		13%	3%	18.6	79%	
6	0	Independents Anglo-Canadian Tel	37	\$1.20	3.2%	\$3.09Ma	D4%	32%	12.0	39%	52%
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Annual Rev. (Mill.) 45 O British Col. Tel. 4 O Calif, Inter. Tel. 22 O Calif, Water & Tel. 20 O Central Tel. 5 O Commonwealth Tel. 5 O Florida Tel. 552 S General Tel. & Elec. 20 O Hawaiian Telephone 8 O Inter-Mountain Tel. 23 S Rochester Tel. 11 O Southwestern St. Tel. 38 O United Utilities 16 O West Coast Tel. 255 S Western Union Tel.	15 26 24 19 27 76 23	e dend	4.7 3.7 2.6 4.3 5.0 3.4 4.8 4.0 4.6 2.7	Recent Share Earnings 1.64Ma .96Ma 1.79De 1.88Ma 1.35De 1.21My .91De 1.43Ma 1.57De 1.64De 1.38Ma 1.89De	D3 16 D5 6 2 D7	Aver. Incr. In Sh. Earn. 1993-58 NC 2 5 20 NC 4 4 3	27.4 15.6 14.5 12.8 14.1 22.3 24.9 18.0 17.6 20.3 15.9 18.9 18.8 23.3	Div., Pay- out 122 63 67 53 67 83 66 78 88 70 76 76 87 63	Approx. Common Stock Equity 28 24 37 33 35 42 34 43 54 33 37 36 32 85
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43 S American Water Works.	14	\$.60	4.3%	\$1.10Ma	16%	_	12.7	55%	19%
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A—American Stock Exchagne. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. Ja—January; F—February; Ma—March; Ap—April; My—May; Je—June; Jy—July; Au—August; Se—September; Oc—October; N—November; De—December, NC—Not comparable. NA—Not available. D—Decrease. *On average shares. (a) Adjusted to eliminate 13 cents per share of nonrecurring tax savings. (b) Also stock dividend in 1958. (d) Also 1 per cent stock dividend quarterly. (e) Also 10 per cent stock dividend May 19, 1958. (f) Includes extras. (g) Five per cent stock dividend April 10, 1959. (i) Also 5 per cent stock dividend December 29, 1958. (j) Also 5 per cent stock dividend March 19, 1959. (k) Also 20 per cent stock dividend March 9, 1959. (L) Also 10 per cent stock dividend June 10, 1959. (n) Excludes profit realized on sale of Los Angeles Transit \$3.81 per share. (o) Also 5 per cent stock dividend June 30, 1959. **On combined common and common B stocks. x—1952-57.



What Others Think

Labor Economist Sour on Utility Commission Regulation

In mid-June Solomon Barkin, director of research for the Textile Workers Union of America, presented an address entitled "Public Utility Regulation as Viewed by a Labor Economist." Mr. Barkin spoke before the Great Lakes Conference of Railroad and Utilities Commissioners, who were meeting at the Greenbrier Hotel in White Sulphur

Springs, West Virginia.

It is Mr. Barkin's contention that the American people are on the "threshold" of demanding a review of our system of public utility regulation. This may be news to some readers and state commissioners who have not heard about it. But Mr. Barkin is pretty sure. The single most important cause of unrest he finds is the dissatisfaction with rising service rates. The second general cause of dissatisfaction, he thinks, is the general public's knowledge that at times regulators have not faithfully performed their duties on local, state, and federal levels.

Added to these complaints Barkin finds two additional causes for dissatisfaction with our American system of public utility regulation: "First, the managements of utilities are a class apart from investors... Capital is rented... whether it be invested in the forms of bonds, preferred or common stocks." Mr. Barkin believes that the differences in risks do

not justify this classification and that the fact should be recognized. Second, the private, competitive industries in America have taken over the philosophies of price determination in the utility field. They too compute prices by a process of cumulating costs, justified by "conjured" theories of accounting.

MR. BARKIN believes that all of these trends are prodding American people to look for a quicker re-evaluation of our economic life. In the end, however, rising price levels will probably precipitate an overhauling of the public utility regulatory system. He said:

. . . A more efficient national economy demands that we use the tools of private industry—namely, operational research—to integrate the agencies performing similar service and that we adopt pricing theories which assure us the best overall services at the lowest costs.

Mr. Barkin observed that labor standards in public utility industries have tended to lag behind unions in other fields. This may surprise some utility company managers who generally feel that, aside from their other problems, their labor relations have been pretty good compared

with other nonregulated industries. The utilities took the lead in establishing pension and retirement systems.

Why should a labor union, not connected with the utility business, especially interest itself in utility regulation? Barkin thinks that the functions of the trade unions in regulated industries are fourfold: (1) To inform regulatory bodies of actual working conditions and standards to insure that managements' claims concerning labor standards coincide with reality. Mr. Barkin states that all too often managements have "gilded" the picture in their presentation of a rate case to secure liberal awards and that often public utility commissioners fail to call on union representatives for their side of the picture. (2) To obtain protection of workers' rights in cases of changes effected for greater efficiency or higher productivity or substitutions in service. (3) To enjoin regulatory agencies from injecting themselves into the union-management bargaining process. (4) Active participation in safety regulations and application of technology.

LABOR unions often participate in proceedings before regulatory commissions as spokesmen for consumer interests. Mr. Barkin thinks this is a natural and proper rôle. Unions speak out regarding objections to rising rates, excessive returns, and failure of the utilities to control costs and on occasion to criticize the quality of service.

The trade union movement, the economist said, has actively campaigned and supported the appointment of men to rate-making commissions who will appraise utility proposals most critically and who will show courage in seeking to restrict increases in the rate structure and improve service. But the fact that utility rates have gone up far less in proportion

to other living costs, and that electric utility service is the only major living cost still priced *below* the pre-World War II national average, gets no recognition from the critical Mr. Barkin.

Mr. Barkin believes that there are several questions which must be raised in the public utility field. Is the distinction between bonds and preferred and common stocks in this field justified? The basic risks are not strikingly different between preferred and common stocks. However, the common stock presumes that there is an extraordinary risk in the investment which is to be rewarded through appreciation and depreciation of values. Mr. Barkin believes that the existence of common stock distorts the nature of the public utility and invites speculation and encourages accounting practices which inflate capital value—resulting in rate boosts.

FUNDAMENTALLY, Mr. Barkin advocates that the differences in classes of equity should be eliminated. All financing of public utilities should be done through the use of dividend-limited securities such as bonds or preferred stock. He states:

The adoption of this course would eliminate many troublesome evaluation procedures now confronting the public utility commissioners. The reward would be based, as in the case of all fixed income-bearing securities, upon the original investment rather than upon some fictitious evaluation of the properties themselves.

Mr. Barkin also questions the charges made by corporations for activities designed to promote political causes of value to the corporation. Public relations expenses should be kept to a minimum and should be confined to advancement and improvement of service and not used for

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"BETTER LUCK NEXT TIME"

agitation for or against policies being developed by legislative or regulatory bodies.

A THIRD area which Mr. Barkin feels needs some study is the establishment of adequate numbers of competitive units operated by public or co-operative agencies to serve communities and thus to form a yardstick for the regulatory bodies. He states that TVA has developed such units and that greater efficiency in public power units has resulted.

Regarding rate setting, Mr. Barkin

feels that too much accent has been placed on past experience as a determinant of costs and revenue. He urges more imaginative use of lower prices as a means of increasing consumption. Another rate problem worthy of study is the possibility of substituting rate for profit targets. If this system were used, the commissioners would consider offering the companies competitive rates with no limit on profits to stimulate management to innovation and cost reduction efforts.

He notes:

The latter proposal may be part of a new program of incentives for effective management. The latter's function in the public utility systems must be carefully re-evaluated. Since the managements in these industries are the dominant groups which literally hire capital to finance the facilities and systems that they manage, and the effectiveness of the system is dependent upon these managements, we must take a leaf out of the books of big business and concentrate the incentives on them rather than on the stockholders.

Mr. Barkin concludes that managements may be more "money oriented" than the public servant but they should not be as "money mad" as the executives in big business.

THE speech delivered by Mr. Barkin is of special interest in that he fails to explain just how utility companies would do "all financing" through dividend-lim-

ited securities, such as bonds or preferred stock, without finding themselves in an economically difficult position should a period of depression set in. Many people will remember the difficulties of the railroads in the thirties—which occurred primarily from overextension in the field of bonds.

ANOTHER point that this writer questions is the assumption that the "public servant" enjoys some special immunity from being "money oriented." On individual examination it would probably be found that the money orientation of the "public servant" is equal to the money orientation of the "executive of big business."

Mr. Barkin's contention that the general public is agitated because of rising service rates will surprise many. One wonders just what a disinterested public opinion survey might show regarding this.

-C. M. B.

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Strikes as Part of U.S. System

A TOP federal labor official advanced the theory in Los Angeles recently that strikes "are a small price to pay" for the freedoms inherent in this country's free enterprise economic system.

Some strikes may be beneficial, Austin E. Finnessy, special assistant to the Director of the Federal Mediation and Conciliation Service, told 1,500 delegates to the Retail Clerks International Association convention. Substituting as a convention speaker for FMCS Director Joseph F. Finnegan, Finnessy foresaw nothing but continued industrial strife between labor and management in America's future. He explained:

The end result of strikes is not at all on the negative side. Strikes can, and often do, have a salutary effect on the thinking of labor and management representatives.

Long-standing tensions are often removed by strikes and mutual respect created for the opposite party. Recognition of merit as to the validity of contested positions is often substituted, out of the ordeal by battle, for suspicion and distrust.

While strikes probably are an inevitable expense under our democratic system of free collective bargaining in resolving the conflict of interest, these strikes are first of all a small price to pay for the freedom inherent in our system.

Second, they have some actual bene-

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fits in both the immediate and future relationships between the parties.

Lastly, they actually affect our economic structure much less than other factors which we consider to be of almost no moment.

FINNESSY said that if the public is inclined to shudder at the loss of 23 million man-days of labor during a calendar year by strikes, it should consider that 38 million man-days of productive time are

lost yearly through avoidable industrial accidents, and that avoidable absenteeism is responsible for more than twenty times as many man-days as were lost in all the strikes.

The FMCS special assistant had one word of caution for the union delegates.

"I think we would all agree," he counseled, "that the right to strike is a privilege that must be exercised with great respect and caution. It is the last arrow in the quiver."

Problems in Co-ordinating Personnel Work

At the Northwest Electric Light and Power Association's annual convention at Salt Lake City, Utah, last spring, D. J. McCaig, secretary for the Montana Power Company, made some interesting remarks concerning the co-ordination of personnel work. He said that while his own company did not have a personnel department as such, nevertheless personnel activities were intensively engaged in throughout the company's many departments. Even with this kind of setup, he said, his company finds that co-ordination with other departments must be effected.

Speaking of factors that interfere with co-ordination, McCaig made the following statement:

A problem which is found quite commonly is that of the old-time supervisor who was in the company long before personnel activities attained noticeable status as such. Quite probably the resentment that this old-timer expresses toward personnel work is based in an inherent lack of confidence in his own ability to keep up with progress. Not only may he resent progress, but particularly so when it removes some of the symbols of his authority. His feeling is, of course, seldom expressed as a feeling of

personal weakness; but is more usually rationalized and expressed as a lack of faith in the personnel activity as a whole, or in the particular personnel department of his company.... He will usually state... that the personnel functions previously exercised by the supervisor, which have to some extent been taken on by the personnel department, are necessary to the supervisor in order to maintain his authority.... the authority to employ, promote, discharge, or use disciplinary action.

McCaig said time usually cures the foregoing problem, but there is still another group in which there is a lack of co-ordination and that is young supervisors. They frequently make mistakes in judgment owing to their inexperience, and are inclined to blame the personnel department rather than to accept the responsibility for themselves.

INTERDEPARTMENTAL jealousy and ambition are at the root of lack of co-ordination in some companies, McCaig pointed out. He said this type of problem should be handled by top management. Sometimes, he said, lack of co-ordination of the personnel department with other departments is

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caused by management itself. McCaig stated:

. . . This can happen if management becomes unsold on the value of personnel activities. When this happens the resulting lack of standing with management seems to be carried over the grapevine very, very rapidly and when one department is thought to be unimportant by the boss, it finds trouble in getting the assistance which it needs from others in the organization. Too, loss of standing with the management is very often accompanied by a loss of money in the budget which itself can seriously impair necessary activities.

McCaig warned that the personnel department should examine itself critically to make sure it is not to blame for lack of co-ordination with other departments. He said it is important for personnel people to understand the needs of other people and to not become too technical in describing how the personnel department functions.

Personnel people are often considered ivory tower specialists. And the fact that they are brought in from the outside in most cases, operates to their disadvantage, too. Other departments feel that personnel people, since they did not work their way up through the ranks with the company, cannot fully appreciate the problems of the employees under their jurisdiction. The personnel department also is liable to make errors like these:

There may be a problem involved, too, in the tendency of some personnel people to identify themselves with the employee and his psychological and social problems and to forget that their prime purpose is to secure results for the employer.

Personnel departments may attempt to reach over too far into operating work and infringe in what is properly supervisory authority.

MOREOVER, McCaig insisted, a personnel department must show a willingness to accept more responsibility than its proper share for failures in selecting and handling personnel. He said:

In considering improvement in coordination of departments, we must first look at the fact that such improvement can be secured by voluntary action of other departments. It can be secured by action of management. Or it can be secured by action taken by the personnel department itself. . . .

Co-ordination will be very greatly improved if personnel people make a sincere and extensive effort to explain themselves and their work as completely as possible to all of the organization, but more especially to the people whose co-ordination is important. This would especially include other supervisors and not alone the top level of management. . . .

Of considerable value to the personnel department, McCaig pointed out, would be a definite program of supervisory education that included chapters in personnel requirements and contacts. Also, he said, industrial psychology for supervisors is most helpful.

FORMAL periodic reports to management by personnel on its accomplishments are vitally important, he emphasized. "These reports should be on a factual basis rather than propaganda. This does not mean that the sticking to cold facts need prevent us from projecting future benefits to be achieved.

"In such a report, failures should be reported together with an analysis and suggestions that will enable them to be avoided in the future. In no case should other departments or departmental subordinates be blamed for failures."

McCaig concluded his remarks by say-

ing that co-operation and understanding of others produce more results in handling people than the possession and exercise of authority.

New York State Telephone Association Convention

THE July 30th issue of Public Utilities Fortnightly carried the remarks of Spencer B. Eddy which he delivered before the thirty-seventh annual convention of the New York State Telephone Association at Schroon Lake, New York.

In addition to Mr. Eddy's remarks, a number of other interesting and provocative addresses were presented to the con-

Albert N. Seward, the president of the New York Telephone Association, presented the keynote speech in which he stressed that a convention is the place where persons interested in the same field learn to co-operate and take appropriate action. He said:

. . . When I speak about co-operation, I use the term with full consideration. I do not believe that it should be applied in the way in which one man complained that every time he had been asked to co-operate, he was expected to coo while the other fellow operated.

Mr. Seward stressed that a convention was the place to learn and to gain enthusiasm. It is the place to learn of the value that should be placed on individual work and efforts. The output of industry and the distribution process of business make possible the high standard of living enjoyed in America. This we call "progress" and progress is continually moving. The ever-expanding goals can only be achieved as long as an aggressive sense is maintained. There must be no letdown in the desire to push ahead.

It is important that industry strive for goals which are productive. Mr. Seward noted that much time and effort are wasted in pursuing projects for which there is no real need and for which no market exists. He stated:

The telephone industry has grown great in this country because we have performed a real service to the people. We have given the people what they want and need. We have done this in a way that has recognized the need for continual change or improved methods and better products. There can be no standing still in our business, we must move forward at all times, but this forward march must take in account the needs and desires of our people and customers. Service is the watchword of our business and service given in the most economical manner possible has been the motto under which the telephone business has reached its highest development.

In closing he noted that we should count ourselves fortunate to live in a country where free enterprise prevails and where we are now experiencing the greatest advance in national prosperity that has ever been known. In spite of the dangers of the age in which we live, we should realize that we are lucky to be living in a period of history which will be remembered as the "Golden Age of Man."

HUGH A. BARNHART, president of the United States Independent Telephone Association, addressed the conven-

tion and stressed the responsibility of the telephone industry to keep the legislators informed of its views regarding matters which concern the industry. Mr. Barnhart devoted a large portion of his talk to the telephone excise tax which, at that time, had not been acted upon by Congress. He urged member companies to make their views known to their representatives in Congress and to inform the general public regarding the telephone excise tax matter. It can be assumed that the efforts of the various companies were rewarded since the bill (which designates June 30, 1960, as the expiration date for the tax on local telephone service) is now the law of the land.

Action was also urged to prevent proposed changes in the Wage Hour Act. The proposal now before Congress would increase the minimum wage from \$1 to \$1.25 and only switchboard operators who have exchanges in their own homes would be exempt from the provisions of this law, should it be enacted. Mr. Barnhart urged that all manually operated exchanges be converted to dial systems on the grounds that at some date in the future the increases in the minimum wage will be authorized.

The importance of Mr. Barnhart's contention that telephone companies must keep in close touch with legislators and the public is borne out by the fact that Congress this year enacted legislation which sets a specific date for the expiration of the tax on local telephone service. This action by Congress was in part due to the active way the telephone companies protested regarding the continuance of the tax.

THE changing policy of the telephone companies regarding telephone numbers was outlined by Benjamin H. Oliver, Jr., vice president of the upstate, New York Telephone Company, in a speech en-

titled "Number, Please?" He noted that changes in numbering systems are not always received with open arms by customers and that a great deal has been learned about dialing habits from observation of the customer.

It has been learned that neutral names for exchanges are better than location names. Very often location names are not suitable for exchange names and no town likes to be told that its name is not "suitable." The neutral names, such as "PIlgrim," therefore, solve this problem. It has been further noted that customers do not on all occasions use the full exchange name. "PI-lgrim 7-600" very often becomes "PI 7-600." Advertisers of commercial products also often drop the full exchange name, Many companies are now only using the first two letters. Wichita Falls, Texas, is making a trial of an allnumber arrangement, eliminating even the first two letters and inserting their dial number equivalent.

Research and experimentation are also being conducted relative to the area code numbers now in use in direct distance dialing systems. There is reason to believe that customers will come to think of their area code as part of their telephone number.

As in the past the telephone number system will continue to change and expand with the industry.

THE rôle of public utilities in New York state's economy was the subject of the address delivered by James A. Lundy, chairman of the public service commission of the state of New York.

Mr. Lundy stated that the primary objective of Governor Rockefeller is to strengthen the economy of New York state. Enterprises seeking areas of investment look to three basic factors in determining the area in which they will set-



"HELLO, ELECTRIC COMPANY? YOU KNOW THIS WIRE GOING TO THE GROUND THAT WAS SUPPOSED TO HOLD UP YOUR LIGHT POLES? WELL, I WAS TRYING OUT OUR NEW POWER MOWER AND . . ."

tle: (1) a sound tax structure; (2) availability and quality of man power; (3) adequate power, transportation, and communications facilities. In Mr. Lundy's view the public utilities are the "sinews" of the state's economy and are therefore vital to the economic well-being of the state. He stated:

There are other conditions that the experienced investor, the business promoter or manufacturer looks for but none exceeds in importance the question of the type and quality of the utilities

in the locale in which he contemplates business or industrial activity. He needs reliable sources of power, adequate transportation, and high-grade communications systems.

New York state is fortunate in having utility companies which provide excellent service. Plants are maintained in good condition, and facilities are constantly expanding. Governor Rockefeller, realizing the importance of utilities, has initiated a survey of the state's power needs as projected over the next ten-year period.

M^{R.} Lundy noted that outside of the areas in which an independent telephone company operates there is widespread unawareness of their existence. People are surprised to learn that there are 91 companies providing service in New York in addition to the services provided by the New York Telephone Company. The public fails to realize that many of these independent companies have the most modern types of equipment, with investments running into millions of dollars.

The vitality of the independent companies can be judged from the fact that at the end of the Second World War the independents were worn out from lack of adequate maintenance owing to wartime restrictions on man power and material. Financially, these companies were at a disadvantage in competing for funds on the market. Some of the less resilient were taken over by stronger companies, but the majority of the independents did stage a comeback in spite of great odds.

In 1948 there were 157 independent companies with a total of 345,500 customers with 27 per cent of the subscribers having dial service. In 1958 there were 91 companies with 550,000 customers and 71 per cent of the customers had dial service. Mr. Lundy stated:

In the recent history of the independent telephone industry in this state there is a moral for the business community of today. The banks which advanced the money to the small telephone companies seven or eight or ten years ago did run some financial risk, but in the light of subsequent events it was a good business deal all around. The local banks made a good investment. Some of the local telephone companies, which would have gone under, were able to get back on their feet. Numerous jobs were saved and the communities now enjoy

excellent telephone service. The climate in which all this was accomplished is needed today but on a vastly greater scale.

The chairman of the public service commission closed by reminding the convention members that over the past ten years the doors of the commission had always been open to companies who were seeking help. He stated that with the record established by the telephone industry he was sure that the doors would remain open. He noted that the telephone industry had demonstrated that it knows how to put help to good use.

THE effects of businessmen shirking their responsibilities as citizens were discussed by Cyril M. Joly, Jr., director of public affairs for the eastern division of the National Association of Manufacturers.

Mr. Joly contends that groups such as the telephone association should become politically active in their own communities, or, as the saying goes, at the "grass roots." He noted the expansion of government intervention into areas of private business and he commented:

A revolution is taking place in our country and if you and your associates who believe in the principles of free enterprise do not face up to it and take steps to halt the trend toward bigger and more expensive government, and higher stifling tax rates, you may find yourselves engulfed in a wave of ultraliberal measures.

The National Association of Manufacturers has been attempting to stimulate business into assuming its proper place in the political picture. All too often businessmen consider politics as something to be avoided—assuming that politics at very

WHAT OTHERS THINK

best is a nefarious activity. This attitude is false if one remembers that businessmen have constantly played an important political rôle in shaping the destiny of America. At the very beginning of our nation, businessmen were well represented at the signing of the Declaration of Independence, and as members of the first House and Senate.

He noted that labor has gained tremendous power and labor has channeled much of its vigor into effective political activities. He said that there was no objection to labor being in the political arena; however, if business seeks to check the extremely liberal objectives of the labor movement, business must accept comparable rôles and responsibilities in politics.

Mr. Joly's address brought to light a common error in American thinking. All too often we are inclined to grumble about the government and the effect that a particular group is able to exert on legislators and governmental administrators. However, if we were called on to exert the same force—to assume the same burdens and responsibilities—we would all too often say, "I'm not interested in politics" or "Sorry, I'm too busy." The government in our democracy should be the expression of all facets of our national life. If business fails to assume its proper rôle in the political arena, business will suffer and the national welfare will be done grievous harm.

THE three-day convention was attended by the largest crowd in many years. Hamilton A. Cunningham, executive secretary of the New York State Telephone Association, called the meeting a "complete success." It was announced that the 1960 convention will be held once again at the Scaroon Manor, Schroon Lake, New York, on June 20th, 21st, and 22nd.

"THIRTY years ago, a kilowatt-hour in the home cost about 7 cents; today, about 3 cents. When you consider that the purchasing power of the dollar has gone down, and the consumer's price index has gone up 90 per cent, the comparison is still more astonishing.

"Compare the cost of the electric energy used in the average home, with the cost of an equal amount of energy supplied by human muscle.

"The average home today uses about 3,000 kilowatt-hours a year, costing—at 3 cents—about \$90.

"An average, able-bodied workingman exerts in a year energy equal to 67 kilowatt-hours. If it were possible for men to do the job, it would take over forty men to produce 3,000 kilowatt-hours a year.

"How much would forty house servants cost a year, not counting free board and room, and no vacations? Not less than \$80,000—compared to \$90. Some bargain!

"This is what the privately owned electric power industry, together with the manufacturers of electric appliances—from washing machines to curling irons—have done for you.

"Yet the public power Socialists call them 'enemies of the people.' "

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-E. F. HUTTON,

Industrialist and investment banker.



The March of Events

Salt Water Conversion via Atom Power

In California a proposed salt-to-freshwater conversion plant will be powered by atomic energy, states Secretary of the Interior Seaton. The first of five demonstration water conversion plants will be built by the government at Freeport, Texas, which will produce 1 million gallons of fresh water a day.

The Department of the Interior has asked the Atomic Energy Commission to supply the West coast plant with a low-temperature, low-pressure atomic reactor as a heat source. Representatives of the two groups have started work on specifications for the plant.

Secretary Seaton predicted that oneday conversion plants along our coasts, as well as in many inland areas, would be as common as the familiar standpipe.

EEI Facts Reassuring

WITH the publication in July of the Edison Electric Institute's famous "29 Questions" fact book, some vital statistics on the status of the electric industry were revealed. It shows, for example, that the United States produced about 4,140 kilowatt-hours for every American, nearly four times the Russian per capita production of 1,115 kilowatt-hours.

In 1958 the electric industry made the

largest annual addition of generating facilities in its history, adding 14 million kilowatts of new capability.

To achieve this the electric companies spent \$3.8 billion for new plant and equipment. This represented 12.5 per cent of total 1958 expenditures for new facilities by all industry in the United States.

By mid-1959 there were 131 electric companies participating in 27 atomic projects, including 16 construction undertakings, aimed at making nuclear energy a practical, economic source of electric power.

Taxes on the electric companies, their largest single item of expense, reached a new high, close to \$2 billion, accounting for 23 per cent of total revenues.

Gas Industry Sets Records

THE nation's gas utilities and pipeline companies will spend a record-making \$1,859,000,000 for new construction during 1959, the American Gas Association reports. This will be 4.9 per cent higher than the industry's all-time peak of \$1,772,000,000 set in 1957 and 14.9 per cent more than last year's \$1,618,000,000.

Expenditures for new plants and facilities should continue to rise steadily so that in 1962 the industry should spend

THE MARCH OF EVENTS

about \$2,166,000,000. Construction during the 1959-62 period is expected to cost about \$7.9 billion, or about 25.7 per cent more than the \$6.3 billion spent during the previous four-year period.

The total utility plant of the gas industry has risen to a new high of \$18,070,000,000 from \$16,690,000,000 in 1957, the AGA statistics indicate.

Contract Rail Rate OK'd

A SPECIAL railroad freight charge, based on a stated volume of business over a 12-month period, has been approved by a division of the Interstate Commerce Commission in the matter of an agreement made by major coal-hauling railroads with Virginia Electric & Power Company.

To be eligible for a 35 cents a ton discount on coal hauling, the utility must have received in a previous 12-month period 1.5 million tons of coal over the railroads.

In the past, agreed rail freight charges have been controversial because railroads have threatened to make use of them to regain business lost to barges and trucks. The ICC group stated that the Virginia Electric case is the first in which it has faced the principal conditions of agreed charges.

Two out of the three-member group found the contract rate acceptable. They said it involved no discrimination because other users of coal at six Virginia generating points were not in competition with Virginia Electric.

Alaska

Power Pool Urged for Alaska

An advisory report issued by the Director of the Office of Civil and Defense Mobilization, Leo A. Hoegh, recommends the establishment of a power pool in the Anchorage-Fairbanks area of Alaska. The idea is to guarantee that military establishments and the economy in general will have a reliable source of power. Such a supply, the report states, will help

produce an economy in Alaska which will insure both security and progress. The power pool recommended would consist of the systems of the military, the Bureau of Reclamation, the municipalities, and the electric associations.

According to Mr. Hoegh, the report is being reviewed by OCDM to determine the steps required to carry out the recommendations that have been approved.

California

Protest New Gas Prices

A REPRESENTATIVE of the state of California has complained that if proposed prices for Texas natural gas are allowed to go into effect in the Los Angeles area, they would be unjustifiably increased over present rates. The argument was made that the Texas gas would cost Los Angeles area distributors 50 cents a thousand cubic feet, as compared with

the average cost of 29 cents distributors now pay.

The Texas gas in question is part of a project involving the Transwestern Pipeline Company of Houston. It seeks Federal Power Commission approval of the field prices it would pay natural gas producers and permission to build \$191.7 million worth of transmission facilities. The gas would be pumped to the Arizona-

California border in amounts of about 300 million cubic feet daily and sold to Pacific Lighting Gas Supply Company, which would resell it to southern California consumers through affiliated companies. An FPC examiner has recommended approval of the project, including the prices.

Indiana

Kokomo's Door-to-door Bus

Possibly not a practical plan for other bus company passenger ills, but a proven boon to Kokomo commuters, is Checker Transit Company's plan for picking up passengers at their doors.

Carl L. Newton instituted this personalized transit company when the local bus company went out of business in 1958. Newton's bus-cabs charge only 25 cents and offer a half-hour service, but with a difference. In order to be picked up by

the vehicle, the passenger must call the company. If no passengers call before a trip is scheduled to go out, the bus-cab skips a trip.

Passengers like this service which picks them up at their door and delivers them right back to it, especially in view of the low fare. The flexibility of the service enables Newton to save on gas and repairs. Although his profits thus far have been slim, he hopes to do better through his combination of bus and taxi service.

Michigan

Atom Plant Plans Aired

Consumers Power Company has asked for state authorization of financial arrangements that would speed construction of an atomic generating plant to serve northern Michigan. The company told the Michigan Public Service Commission that the \$10 million write-off on a \$30 million investment would be repaid by 1973 without increased rates.

Consumers Power would add \$10 million to its rate base, then amortize the sum over a 12-year period with no rate

increase on that account. Income taxwise, however, the company would benefit because the \$10 million would be allocated as a cost-of-operation research and development project.

The new plant would be a boiling water type, which is supposed to offer the best chance of achieving competitive power production. It would be a direct-cycle, force-circulation boiling water unit that would produce 50,000 kilowatts of electricity. Research would be its major non-commercial function.

Missouri

Rate Increase Questioned

A MOTION for a rehearing on the Union Electric Company's rate increase was filed with the Missouri Public Service Commission on July 24th. The motion was filed by the St. Louis County League of Municipalities and Richmond Heights and University City.

The commission granted Union Electric an increase of \$6,478,000 a year on July 16th. The new rates would become effective on August 5th unless the case is reopened.

Mayor Nathan B. Kaufman of University City, who also is president of the County League of Municipalities, said

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recently that a formal motion for a rehearing would be filed. He added, however, that if the motion were overruled, the rate increase would not be appealed to the courts. Rehearings seldom are granted by the commission.

Nebraska

Oppose Gas Rate Hike

A GROUP of customers of the Northern Natural Gas Company have expressed opposition to a proposed rate increase by Cities Service Gas Company, one of Northern Natural's suppliers. Twenty-eight utilities — most of them from Iowa, Minnesota, and Nebraska—attended a meeting in Omaha to shape

testimony designed to prevent the rate increase. Carl Cummins, attorney for Northern States Power Company, said the utilities contend the rate rise is not justified and that the increase will ultimately mean an increase in Northern's rates to its customers.

A hearing on the increase will be held in Washington, D. C., in a couple of months.

New Jersey

Transit Plan Approved

A NEW corporation by the name of Capital Transit has been given state public utilities commission approval of its plans to acquire the municipal franchises and equipment of Trenton Transit for \$600,000.

Capital Transit will maintain service for 4,000 daily passengers on 16 routes in the Trenton area. The same schedules and rates of fare that were used by Trenton Transit will be retained by the new company. Many of the old company's employees would also be kept on by the new organization.

Trenton Transit had been on the verge of abandoning service because of losses—it had a deficit of \$131,000 in 1958. Capital Transit is hopeful it will derive \$32,000 in net operating income from the operation of the transit company during the present fiscal year.

Thomas E. Peacock, general manager

Ask Vote on Rail Aid

of Trenton Transit, was named president

of the new company.

A^N outline of a plan to end the commuter crisis in New Jersey was made public by the New Jersey Division of Railroad Transportation. It sent a tentative draft of a bill to the state legislature that would set the program in motion.

The bill calls for a referendum on November 3rd in which the voters would be asked to put the state's credit behind \$430 million in outstanding bonds of the New Jersey turnpike. The money would be used to improve rail service and to grant the railroad companies some tax relief.

The proposed measure would also create a special transportation fund from excess turnpike revenues. The use of the money would be restricted to transportation purposes and spending would be decided by an annual appropriation bill.

New York

To Spend \$1 Billion 1959-63

Consolidated Edison has announced that it plans to spend \$1 billion for

new facilities in the five years 1959 to 1963, inclusive. This is as much as was spent by the company in all the years following World War II.

PUBLIC UTILITIES FORTNIGHTLY

On July 22nd Consolidated Edison increased its system generating capacity by 335,000 kilowatts when it brought in on its line the Arthur Kill station in Travis, Staten Island. The new unit, which cost \$83.5 million, raised the combined generating capacity of the company's nine generating stations to 4,426,000 kilowatts.

Rate Increase Deferred

Upon a one per cent rise in New York city's gross receipts tax on utilities going into effect on July 1st, Consolidated Edison Company asked for a one per cent increase in its electric, gas, and steam

rates to compensate for the increase. This amounted to \$4,571,000. But the New York commission ruled that the hike would have to wait and be included in the general inquiry now being conducted of Consolidated Edison's rate structure. However, this would apply only to the electric portion of the rate request, which amounted to \$3,625,300. The gas and steam rates, the commission stated, would be taken up later in a separate hearing.

Consolidated Edison, in asking for the increase, maintained that its earnings were not adequate to absorb a doubled receipts tax.

Pennsylvania

Increase Conceded "Reasonable"

A 6.4 PER CENT gas rate increase obtained by the Manufacturers Light & Heat Company of Pittsburgh has been called a reasonable one by the parties involved, even the opponents of the \$4,786,500 annual boost.

Attorneys for the gas company, the cities of Pittsburgh and New Castle, as

well as four industrial companies, all signed an agreement in which they conceded that the amount asked for by Manufacturers was satisfactory.

While this agreement has no binding effect on the Pennsylvania commission, it should of course prove highly persuasive. Manufacturers claims the increase is necessary to offset higher operating expenses in addition to its purchases of gas from wholesale suppliers.

Texas

Sells Gas at Big Loss

Down in Houston the city-operated Magnolia Gas System is reported as buying gas for 26.9 cents per thousand cubic feet and selling it at a loss for 26 cents to large industrial users. Moreover, these same big industries are getting 60 per cent of their gas free from the city system simply because of inadequate meters.

Residential users are also paying rates far under those adopted by the city council for the Houston Natural Gas Corporation. The Magnolia Gas System manager explained that special meters which are needed to measure the flow of gas to large industrial customers are lacking and cost \$1,200 each. He claimed he had always been rebuffed in his attempts to secure them on grounds they cost too much.

The system sells gas to about 50 industrial customers and 8,000 residential consumers. Residential customers pay 55 cents for the first 400 cubic feet of gas, whereas Houston Natural Gas charges residential users \$1.60 for the first 400 cubic feet.



Progress of Regulation

Trends and Topics

Rate Differential to Cover Higher Costs of Underground Electric System

COMPARISONS of rates must always be weighed in the light of conditions which affect cost of service. Questions of discrimination because of rate differences also involve questions of cost differences. Some electric companies have found it necessary to impose higher rates for service through underground lines than service through overhead wire construction because of the higher costs of the former.

The Massachusetts commission recently approved such a differential. The commission said that the cost of construction and maintenance of underground systems is substantially in excess of the cost applicable to overhead systems. The commission agreed with Southern Berkshire Power & Electric Company that it would be unfair to the large majority of customers to place the burden of these higher costs occasioned by the underground system on the many customers who do not benefit by it (28 PUR3d 296).

The New York commission, in a rate investigation, said that when one considers the rates being charged in any area, the character of the territory served, the nature of the property, and many other factors, should always be kept in mind. It was said to be impossible to make fair comparisons without reference to local conditions such as the extent of underground as contrasted with overhead lines, among other factors (6 PUR NS 132).

Testimony in a rate proceeding before the New York commission showed that a differential of 1.6 cents between overhead and underground service would cover the extra cost of underground service. The company brought out in cross-examination that certain property had been omitted which if included would raise this to 2.0 cents per kilowatt-hour. The commission said that the rates established by the reduction stated should, therefore, provide a differential not exceeding 2.0 cents per kilowatt-hour for underground service; also a higher minimum charge but not more than double that for overhead service (8 PUR NS 143, 155).

The related question of charges for underground extensions is discussed by the California commission in the Walnut Creek case, reviewed below.

Review of Current Cases

Applicants for Underground Electric Service Must Pay for Underground Facilities

THE California commission dismissed a complaint by the city of Walnut Creek seeking to compel Pacific Gas and Electric Company to provide service and bear the cost of underground facilities required by ordinance in certain districts. The area affected by an ordinance of Walnut Creek is not now developed but is to be developed in some indefinite future period. The company did not challenge the validity of the ordinance. It required, however, that applicants for service pay the cost of the underground facilities in excess of the cost of overhead equipment.

Besides contending that the company's position was discriminatory, the city urged that it would thwart the intent of the ordinance.

The California commission sustained the company. While it was felt that revision of the company's rules relating to underground facilities might be overdue, nevertheless, they supported the company's practice, of many years' standing, of requiring applicants for underground service to pay the estimated cost of providing underground facilities, less the cost of overhead facilities. This is the general practice of all electric utilities in the state, the commission observed.

Economic Justification

Held to be "contrary to the very essence of regulation" was a contention that the company must provide service to all prospective customers in its service territory regardless of the expense it would have to incur in complying with an ordinance prescribing the types of facilities which may be installed in a given area. Reasonableness, the commission pointed out, is the foundation of regulation.

In areas where the density and magnitude of the electrical load economically justify underground installation, utilities generally provide underground facilities without special charge. Here, however, the entire city of Walnut Creek, much less the underground districts alone, did not have as great a load as some single buildings elsewhere in the company's system. City of Walnut Creek v. Pacific Gas & E. Co. Decision No. 58551, Case No. 6173, June 8, 1959.

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Future Plant Additions Properly Included

THE Maryland court of appeals has reversed a circuit court judgment and held that the commission could properly include future plant additions in Baltimore Gas & Electric Company's fair value rate base where the property would be put in service by the end of the current year. The commission, in determining that a 6.20 per cent return was reasonable, had added net additions to plant in 1958 to a rate base figured as of the end of 1957.

The lower court's view that, unless property was actually in service at the time of the company's application for rate revision, it was not used and useful in rendering service to the public, was considered too narrow.

The phrase "used and useful in the public service," pointed out the court, historically does not rigidly and literally bind the rate-setting body to that which has occurred at the time of the hearing. It

had long since been established, for example, that inclusion of property acquired and held in anticipation of reasonable future needs but not actually in service is proper. The regulatory body could include such property if it determined that the acquisition was reasonably necessary and its use might be anticipated with reasonable precision, or if the property was likely to be placed in service within the period for which the rates were fixed.

Conditions in recent years, continued the court, have persuaded regulatory agencies throughout the country to include in the rate base, as used and useful in the public service, property estimated to be in service by the end of the test year. Conditions which have prompted this practice are inflation, attrition, and regulatory lag.

The court, citing "Rate of Return," by Ellsworth Nichols, pages 153 and 158, noted that the commission could have at-

tempted to meet the problems of inflation, attrition, and regulatory lag in various ways. It chose, as an appropriate method of rate making under present conditions, to use as a test year the calendar year in which the hearing was held (rather than a 12-month period which had already expired), to use a year-end (rather than an average) rate base, to include in the rate base net additions to plant that the evidence showed would be in service by the end of the test year, and to use estimated income and expenses of the test year to determine the proper rate of return. The commission could reasonably and properly determine that the time of use of the net additions to plant in 1958 was, in the words of Justice Cardozo, "so near that they may be said, at least by analogy, to have the quality of working capital." Baltimore Gas & E. Co. v. People's Counsel, No. 21, June 29, 1959.

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Commission Justified in Subjecting Electric Co-op to Regulation

THE Arizona supreme court affirmed, as modified, a judgment affirming a commission order in a case arising from a complaint by members of an electric cooperative. The co-operative had contended that the court erred in approving the assumption by the commission of jurisdiction over the co-operative.

The court pointed out that an electric co-operative is a public service corporation subject to commission jurisdiction. Although it is not a public utility, since it is not a person, corporation, or association engaged in a business affected with a public interest and required to serve everyone in the area where it operates who applies for service, the Constitution granted the commission authority to assume jurisdiction over public service corporations. Moreover, aside from constitutional language, a threatened competitive war be-

tween the co-op and a private utility had made it imperative that the co-op be subjected to the commission's regulatory powers.

Duplication of Facilities

Another complaint advanced by the cooperative was that it had been prohibited from duplicating existing electrical facilities when there was no such order outstanding as to any other utility duplicating its facilities. The court's answer was that it is implicit in the principal of regulated monopolies that duplication of services is prohibited. Also, restrictions imposed upon any other companies would have been wholly outside the issues of the case and pure dictum.

Charter Restrictions

The court did agree with the co-op's

contention that the judgment erroneously required it to serve not only its members but any one applying for service. The articles of incorporation set forth the co-op as a nonstock and nonprofit co-operative, limiting service to members only. Any attempt to go beyond the service of electric energy to members would be ultra vires and void, said the court. The judgment did not have the effect of changing the nature and purpose of the co-op's business to other than that stated in the articles of incorporation.

Service Discontinuance

The court also agreed that the commission had erred in directing the co-op to remove facilities and discontinue service to specific customers if a private company extended service to such customers within ninety days. The uncontroverted facts showed that at the time the co-operative made its installations and began service, it had been free to enter the area in question and serve members without let or hindrance from any source. The co-op had expended a considerable sum of money in making the installations preparatory to

service to those members, and would be able to salvage little of the cost if it was required to remove them.

Second-class Citizen

The co-operative had also complained that the commission's order had made it a "second-class citizen." If by the term, the co-op meant that the commission had classified it as something less than a fullfledged public utility, said the commission, the designation was correct. A public utility is a person, corporation, or other association carrying on an enterprise for the accommodation of the public, the members of which, as such, are entitled as of right to use its facilities. It carries with it the duty to serve the public and treat all persons alike without discrimination. The cooperative was only required to serve its own members and under its charter was only empowered to serve its mem-The commission had assumed jurisdiction over it, not because it was a public utility, but because it was a public service corporation. Trico Electric Co-op, Inc. v. Arizona Corp. Commission et al. 339 P2d 1046.

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No Bias Presumed from Coupling of Commission's Judicial Function with Obligation to Contract

THE Vermont supreme court affirmed a commission order denying municipal electric plants permission to construct high-power transmission lines as part of the transmission system for the distribution of St. Lawrence power. The cost of such a project was considered by the court to be one of the critical elements in evaluating public good.

The cost represents the burden against which the benefits must be balanced, particularly where the impact of such cost will be passed on to the state's consumers of electrical energy generally. In the absence of evidence as to cost of construction, it would have been error for the commission to find affirmatively on the issue of public good.

The municipal plants sought to avoid the consequences of failing to introduce evidence as to cost of construction by stating that the record made an obvious case of prejudgment on the part of the commission. Arbitrary or capricious actions on the part of a trier of facts, answered the court, will not be presumed in the absence of any evidentiary support. The mere coupling of the judicial function of the commission with the obligation to contract for St. Lawrence power, without more, did not raise a presumption of bias, prejudice, prejudgment, or denial of due process. Re Village of Lyndonville et al. 151 A2d 319.

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Deferred Income Tax Reserves Deducted from Working Capital

THE New Hampshire supreme court affirmed a commission order (27 PUR3d 113) increasing electric rates for Public Service Company of New Hampshire and its wholly owned subsidiary, New Hampshire Electric Company. The rates were calculated to yield a return of 5.65 per cent.

The chief issue relating to the rate base determination arose out of the circumstance that Public Service Company held certain "emergency certificates" entitling it to an income tax deduction for accelerated amortization of the facilities to which the certificates relate.

Under accounting procedures established by the commission, the company had established a "restricted surplus account" reflecting the difference between the actual income tax paid after deductions for accelerated amortization and the amount which the tax would have been if computed with deductions for normal depreciation only. This restricted surplus was held by the company against future income tax liability in order to protect future ratepayers.

For rate-making purposes, however, the company's expense for income taxes for the test year was normalized by an upward adjustment. This permitted recovery of income tax liability through rates at a constant level, based upon normal depreciation of the company's property throughout its useful life, rather than at a lower level for the five-year period of accelerated amortization, followed by a higher level for the remaining life of the property.

The commission had deducted from the company's working capital requirement \$2,702,000 on account of "deferred income tax availability." The commission had found this amount to be the average amount of "restricted surplus" available during the test year.

The court concluded that the commission acted properly. It said that to the extent that tax benefits resulted to the company from accelerated amortization, the investor was relieved from the need for providing working capital, and the company was relieved of the burden of obtaining additional financing to provide such capital.

Current ratepayers, however, received no benefit, according to the court, since they pay rates calculated on a basis of a normal-size tax, as if the company were taxed upon its income reduced by unaccelerated depreciation only.

The court pointed out that Congress has not undertaken to provide what effect, if any, § 168 of the Internal Revenue Code of 1954 shall have upon rate making. It said that the congressional purpose was accomplished when the company was encouraged to undertake the construction of facilities deemed necessary in the interest of national defense.

Rate Statutes

The companies claimed that the commission's action was erroneous as a matter of law. The governing rate statute provided that temporary rates should be sufficient to yield not less than a reasonable return on the cost of the property of the utility, used and useful in the public service, less accrued depreciation. The companies claimed that the restricted surplus account was property of the utility upon which it was entitled, under the statute, to a reasonable return. The court believed that this argument disregarded the fact that the statute provided for a return upon the cost of the property, and that the surplus account was acquired by the company without cost.

Rate Classifications

Wholesale consumers argued that their rate was discriminatory because it provided a proportionately higher rate of return than the overall average rate allowed. The court rejected the argument. The commission had found that in allocating the total rate increase among the various classes of service, the companies had improved the relationship of class returns to the average return.

In support of their argument that they would be compelled unreasonably to subsidize other classes of consumers, the companies cited "Preparing for the Utility Rate Case," by Francis X. Welch, for the proposition that an equitable rate means one which will require the customer "to pay no more and no less than his fair share

of the cost to the utility serving him." The court pointed out, however, that Mr. Welch also said that "this is a theory which is virtually impossible to translate into precise mathematical practice."

It attached significance to his comment that "It is primarily the responsibility of . . . management, which obviously has more intimate knowledge and direct experience with the economics of its own business operations, to establish the various rate structures." Unlawful discrimination, in Mr. Welch's judgment, comes in question only when there is "a demonstrable abuse of the managerial discretion in selecting or adjusting the rate structure in the first place."

The court believed that the commission expressly recognized characteristics calling for differences in the level of return among the classes. At the same time, it said, the decision effected greater uniformity among the classes of customers by directing a closer approach to the average of the return paid by all the classes. It concluded that the statutory presumption in favor of the commission's finding that the differential in rates which persisted was reasonable was not overcome by other evidence. Public Service Co. of New Hampshire et al. v. New Hampshire et al. June 30, 1959.

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Legislature Can Limit Commission Jurisdiction

THE legislature has power to limit the jurisdiction of the commission so as to preclude it from authorizing new passenger stage operations in Los Angeles county, the California supreme court ruled, notwithstanding a provision of the Public Utilities Code empowering the commission to certificate passenger stage operations and a state Constitution provision that nothing in the Constitution shall limit the power of the legislature to con-

fer powers on the state commission. It was held that, in enacting a statute creating a "special authority" to establish a mass rapid transit system in the Los Angeles metropolitan area and declaring that only a specially created authority could operate effectively in the area because of its nature and composition, the legislature contemplated a single integrated system of public transportation in the area and precluded the commission from certificating

any new passenger stage services.

The commission contended that the Public Utilities Code empowering it to certificate passenger stage operations controlled the statute creating the transit authority, on the ground that the Public Utility Act was the supreme state law. In support of this proposition the commission pointed to the state Constitution which provides that nothing in the Constitution shall limit the power of the legislature to confer powers on the commission.

sion.

Only in this limited sense, the court noted, is the Public Utility Act the supreme state law. The legislature has the same power to modify or withdraw as it has to add to any jurisdiction previously conferred on the commission. Since the commission's jurisdiction to grant certificates is derived entirely from the legislature, that body has plenary power to modify, curtail, or abridge such jurisdiction. Los Angeles Metropolitan Transit Authority v. California Pub. Utilities Commission, 339 P2d 129.

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Rate Change Filings Upheld under Natural Gas Tariff and Service Agreements

THE U. S. appeals court for the fifth circuit ruled that the Federal Power Commission had properly accepted for filing rate changes proposed by El Paso Natural Gas Company.

Tariff and service agreements between El Paso Natural Gas and several utility company customers recognized that rates may be changed in accordance with §§ 4(d) and 4(e) of the Natural Gas Act. In upholding the commission, the court relied upon the 1958 Memphis decision handed down by the U. S. Supreme Court (26 PUR3d 314).

The question before the court in the instant case was whether the commission should have rejected the filing as being an unlawful attempt to make a unilateral increase in rates for gas supplied under contracts fixing prices. The ruling in the Memphis case, involving a similar tariff and service agreement, resolved this question.

Statute Permits Filings

The high court held in that case that the Natural Gas Act did not preclude the pipeline company from changing its rates by filing new rate schedules under § 4(d), subject to review by the commission under § 4(e).

It was there pointed out that the act comes into play as to rate changes only in (1) requiring the seller to file timely notice of change, (2) giving the commission authority to review such changes, and (3) authorizing the commission to suspend new rates and to require the posting of a refund bond.

The Supreme Court further observed that Congress, in enacting the Natural Gas Act, was concerned not only with the protection of consumers from excessive rates but also with the legitimate interests of natural gas companies in whose financial stability the gas-consuming public has a vital stake.

Under the rule in the Memphis opinion, said the appeals court, contract provisions recognizing that rates may be changed in accordance with §§ 4(d) and 4(e) procedures are valid and do not violate either the letter or the spirit of the statute. Nevada Nat. Gas Pipe Line Co. et al. v. Federal Power Commission, Nos. 17074 et al. May 27, 1959.

PUBLIC UTILITIES FORTNIGHTLY

Sale of Bus Business Disapproved Because of Financial Factors

THE Massachusetts commission disapproved the proposed sale of a part of a large bus company's business to a small operator because it was not satisfied that the transferee had the resources to continue the operation for a reasonable period and to weather any temporary adverse conditions that might develop. In discussing the term "public interest" as used in the common carrier statutes, the commission said that a proposed transferee must establish his fitness, willingness, and ability to perform or furnish transportation for compensation.

Financial Ability

The principal evidence of financial ability of the purchaser consisted of a balance sheet. On its face, it indicated an excess of current liabilities over current assets of more than \$20,000. Furthermore, the statement of current assets included many items of personal property, not associated with the motor coach business. It was also noted that not all asset items were stated on a cost basis, but rather reflected someone's estimate of present value. This was contrary to the commission's rules. In particular, real estate which was stated to be approximately \$50,000 in the balance sheet was apparently purchased at a much lower cost.

The commission said that the application presented a case of a marginal operator assuming substantial obligations of a carrier with vastly greater resources and depending entirely upon credit to finance the new undertaking. It pointed out, however, that it does not necessarily follow that a transfer from a larger to a smaller carrier can never be approved. On the contrary, it has approved many transfers of this sort. Nor did it intend any personal reflection on the proposed transferee. In assessing the public interest, however, it must put short-run considerations aside.

The commission acknowledged the fact that since November, 1958, the selling company has not engaged in its transportation operations, owing to the pendency of a strike of its employees. Although a factor to be considered, this absence of service during the strike could not becloud the fact that the effect of the commission's decision would be felt for an indefinite period in the future.

The commission pointed out that if the transfer were approved, and later the transferee should be unable to continue service, the selling company, even if the strike were then settled, would not be obligated to resume service. The public might then suffer complete and permanent loss of service. In view of this, the commission disapproved the sale. Re Eastern Massachusetts Street R. Co. et al. DPU 12883, May 28, 1959.

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Producer Price Condition Issue Avoided in Pipeline Expansion Case by Purchase of Gas Leases

THE Federal Power Commission approved a \$49 million expansion project proposed by Texas Eastern Transmission Corporation in an amended application. The expansion will amount to 101,-

660 Mcf of gas per day, designed to serve a number of existing utility customers. For the additional gas supply needed for this expansion, the pipeline relied on its right to acquire the Rayne field leases in southern Louisiana under a lease-purchase agreement filed with the commission in late 1958.

In the original application Texas Eastern proposed to obtain the additional necessary gas supply from the Rayne field by way of gas purchase contracts with producers at an initial price of 22.6 cents per Mcf plus a tax reimbursement of 1.3 cents. Several protestants in that stage of the proceeding unsuccessfully urged the examiner to impose a price condition on the purchase of this gas. But before the commission could rule on the examiner's decision, the application was amended to show that the project would rely upon the outright acquisition of the Rayne field leases.

Price of Acquisition of Leases

The only opposition to the company's revised project came from the New York commission. It was contended that in order to justify certification of the modified project, the cost to Texas Eastern of the Rayne field leases must be justified on the basis of a justifiable cost of the properties to the producers from whom the pipeline would acquire them. The state commission urged that this was the federal authority's only opportunity to require producer disclosure of the costs associated with this gas and their relation to the sale price of the leases.

The Federal Power Commission held that the public convenience and necessity were amply shown to support the modified project without examining into the cost to the pipeline of the leases to the extent advocated by the state agency. The commission noted that Texas Eastern had asked for no certificate authorizing the acquisition and that the commission had no authority to issue such a certificate.

It appeared, however, that the average cost of producing the Rayne field gas would be 20.59 cents per Mcf and that the acquisition would result in a cost of gas of about two cents per Mcf lower than the initial price the producers originally proposed. Along with this considerable advantage was the fact that the price for the leases was fixed and not subject to price escalations and indeterminate increases which could be expected under gas purchase contracts.

Moreover, control of the rate of production by the pipeline would permit improved flexibility of pipeline operations, and since the purchase of leases is not a gas purchase contract, the price paid for them would not disrupt area prices by triggering favored-nation or price redetermination clauses in existing gas purchase contracts.

Project Economically Feasible

After the proposed facilities are constructed, Texas Eastern anticipates a system-wide rate of return for the first three years of 4.91 per cent, 4.85 per cent, and 4.56 per cent. If rates are allowed to be increased, as proposed in another proceeding, a rate of return of 6.43 per cent, 6.41 per cent, and 6.13 per cent can be expected for 1959, 1960, and 1961. The commission thought the project was economically feasible. There was no question as to engineering feasibility, markets, or financing. Re Texas Eastern Transmission Corp. et al. Opinion No. 322, Docket Nos. G-12446 et al. June 23, 1959.

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CAB Expertise Overrides Statutory Presumption

The U.S. court of appeals affirmed a Civil Aeronautics Board's order re-

fusing to approve the acquisition of a local or feeder service airline by another such airline. The court pointed out that its function was to ascertain whether the inferences drawn by the administrative agency were within the reasonable boundaries prescribed by the facts, not to draw its own inferences. The facts supported the board's denial of the acquisition application. One airline had urged that the Civil Aeronautics Act raised a presumption in favor of mergers of air carriers. Be that as it may, commented the court, any such presumption can hardly survive the considered judgment of the board that a particular proposal is not consistent with the public interest.

The airline next contended that the board had been arbitrary and had failed to make sufficient findings when it departed from established norms. For example, the airline argued, it was an established rule that the size of a proposed merged system is immaterial to approval of the merger, because the board had found the size of a merged system immaterial in another case.

The court pointed out that because the

size of a merged system had been found immaterial in one case could not make it an immaterial factor in all cases and under all circumstances. Likewise, because the board had established in another case that feeder routes need not be complementary in order to be merged, it was not inconsistent to find in the present case that the trade areas of the two airlines had to be complementary.

Lack of interarea local traffic, in the present case, was just one of several critical factors. Such problems as these, said the court, cannot be solved by a mathematical computation. Judgment necessarily enters into each one, and Congress has given the agency power to exercise that judgment. The court can and should insure that the agency stays within the bounds of reason and outside the realm of caprice, but the court cannot substitute its own judgment as to what would or would not be inconsistent with the public interest in a proposed merger. North Central Airlines, Inc. v. Civil Aeronautics Board, 265 F2d 581.

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Court Rules on Attachments to Directories

THE New York court of appeals has reversed a judgment which affirmed a commission order approving a telephone company rule prohibiting subscribers from attaching to, or using with, telephone directories a cover not furnished by the company containing advertising.

A telephone directory, pointed out the court, is a device used in the business of telephonic communications, and is, therefore, subject to the regulatory powers of the commission. However, the commission's jurisdiction is limited to those parts of the directory which constitute an essential public service. Alphabetical listing in the directories is such an essential service, but once a telephone company has dis-

charged its duty, it is under no obligation to solicit advertisements for its directories. The sale of advertisements is not considered an essential public service.

The commission's jurisdiction, with respect to advertisements, is limited to seeing that advertising is set up in a manner which does not unduly interfere with the use of the ordinary listings and that the privilege of inserting advertisements is available to all subscribers upon the same terms and conditions, without discrimination. One of the petitioners, National Merchandising Corporation, was engaged in promotional advertising, and distributed to telephone subscribers in a particular area a clear plastic directory cover, to which

was attached a single opaque sheet containing advertisements of local merchants, together with their telephone numbers, as well as several emergency numbers for the locality. The covers were distributed with the compliments of the local advertisers. Once delivered, National claimed, it retained no control over the use to which the covers might be put by the subscriber.

The court noted that the proposed tariff, as approved by the commission, ostensibly governed the contractual relations of the telephone company and its subscribers, but its admitted purpose was to inhibit the activities of National and other firms engaged in similar enterprises. It is one thing, said the court, to have limited jurisdiction over advertisements in the

directory to see that all advertisers are treated equitably, and to insure that maximum revenues are derived from the sale of advertisements. It is quite another thing to assert jurisdiction to immunize telephone companies from competition, where the telephone companies engage in activities which do not come within the scope of an essential public service. Further, said the court, the attempted usurpation of power cannot be justified on the ground that the activity of National constitutes unfair competition or interference with the telephone companies' property rights since such matters are for the courts. National Merchandising Corp. v. New York Pub. Service Commission, 5 NY2d 485, 158 NE2d 714.

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Minimum Bill for More than Readiness to Serve Held Unreasonable

A MINIMUM bill of a water utility should be designed so as to enable the company to recover from all of its consumers their proportionate share of certain fixed charges incurred in serving them (such as depreciation and taxes) and costs directly related to customers (such as meter reading and customers' accounting), regardless of whether a customer uses any water at all during a billing period, the Wyoming commission pointed out.

Aside from a proposed minimum bill increase, the commission approved a water rate increase requested by Southern Wyoming Utilities Company for service in several communities. The new rates will afford little more than 4 per cent return on the depreciated original cost of facilities.

A minimum bill of \$3 per month for each meter was disapproved since it would permit consumers to use a considerable quantity of water (5,000 gallons in one community). The commission thought this was more than a bare service charge

for readiness to serve, aside from any water consumed, and it concluded that the proposed charge was unreasonable. The established charge of \$2 was continued.

Protestants' contention that the company paid an affiliated company an excessive price for electric power required for pumping water was rejected. In a previous proceeding, the commission had approved this price. Furthermore, it was observed that during 1957 the affiliate had earned a rate of return of but 6.14 per cent on the depreciated original cost of its generating facilities.

In one community, water pressure was found to be inadequate for proper fire protection, and to some extent for domestic water service. The commission directed the company to make an engineering study of the water system in this area and submit a report within sixty days. Appropriate action will then be taken. Re Southern Wyoming Utilities Co. Docket No. 9350, June 17, 1959.

PUBLIC UTILITIES FORTNIGHTLY

Customer Liable for Delayed Toll Charges

If a telephone company's delay in billing toll charges does not prejudice the customer, he has no basis for complaint, the New Jersey commission ruled. A customer who had made a number of toll calls on the credit card plan between April and August sought to avoid paying the charges for the calls which were not billed until the end of September. As grounds for refusing to pay, he pointed to the delay of several months in billing, along with the fact that he had paid previous monthly bills, covering this period, with checks marked "payment in full."

The company urged that toll charges were payable under its tariff upon request and that the customer's checks previously accepted represented only the payment of the bill rendered.

The commission found that by the nature of the charges made under the credit card system and because of the great size and complexity of the company's operations, there must of necessity be some delay in the billing of toll call charges. There was no evidence of prejudice to the customer by reason of the delay. The commission also held that the mere notation "payment in full" on a check submitted to discharge a bill does not complete the payment of charges then unknown to the company. Komisarek v. New Jersey Bell Teleph. Co. Docket No. 11211, June 2, 1959.

3

Telephone, Withdrawn from Husband, Properly Denied to Wife

THE New Jersey commission sustained the New Jersey Bell Telephone Company in refusing to restore service which had been withdrawn by order of the chief of police of Jersey City following the arrest of the customer for gambling. The instant proceedings arose upon petition of the wife of the former customer for restoration of service.

A company regulation provides that service may be refused upon objection by a governmental authority. In answer to a company inquiry, the chief of police did not expressly object to restoration of service but stated that "since the discontinuance of service was requested as a result of a gambling arrest on the premises, I cannot recommend a restoration of service."

The commission considered this statement tantamount to an objection to

restoration of service, within the meaning of the company regulation. It was held that the regulation was reasonable and that the company could justly refuse service unless a proper governmental official indicated that there was no objection. The commission commented that it would not pass upon the propriety of the refusal of the official to grant a letter of "no objection" to restoration of service. The proper forum was held to be a court of law.

The question remained whether the refusal to provide service should extend to a spouse. In the commission's view, the evidence showed conclusively that the petitioning wife in this case was merely an agent for her husband since the telephone, if restored, would be paid for by him and he would have free access to it. Lupo v. New Jersey Bell Teleph. Co. Docket No. 11209, May 29, 1959.

Exhaustion of Administrative Remedies before Review

THE rule that administrative remedies must be exhausted before judicial review of commission orders may be obtained has been reiterated by the South Carolina supreme court. The court ruled that a lower court had properly exercised its discretion in refusing to entertain jurisdiction in a proceeding by a railroad for declaratory judgment in a matter relating to the use of conductors in sleeping cars. In effect, the company sought to bypass the commission.

The high court held that the lower court order must be affirmed in the interest of orderly procedure, notwithstanding that there had been considerable delay in a commission decision on an earlier petition by the railroad before the administrative body. The reason for the delay was in dispute between counsel, but the instant action was begun before a commission decision had been rendered. Pullman Co. v. South Carolina Pub. Service Commission et al. 108 SE2d 571.

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Statutory Exemption Must Be Given Effect

THE California commission held that a company which collected and stored and shipped grocery merchandise was not a freight forwarder subject to commission regulation, because its activities fell within a statutory exemption. The evidence showed that the company did not hold itself out to serve the public or any portion thereof, performed services only for its members, and conducted operations on a nonprofit basis.

While it is true that any claimed exemption from the reach of a comprehensive regulatory statute must be strictly construed, commented the commission, it is also true that such exemption must be given effect if the plain language of the statute prescribes such exemption, even though the exemption tends to defeat the overall purpose of the statute. It is the province of the legislature so to legislate, and it is the duty of the regulatory body to give effect to such legislation.

Doubtless, pointed out the commission, exemptions make administration of a regulatory statute more difficult, but that is no concern of the regulatory body. Exemption from a regulatory statute should not be nullified by strained construction or impermissible interpretation, no matter how laudable the end sought may be. Unlawful means cannot result in a lawful end. Re Grocery Shippers, Inc. Decision No. 58676, Case No. 6138, June 29, 1959.

3

Private Carrier Permit on Limited Scale Granted Warehouseman

THE Colorado commission granted a private motor carrier permit to a warehouseman, authorizing transportation to and from the warehouse on a limited scale, within the Denver environs. The applicant had requested authority to and from any point in the state.

The commission was of the opinion that

the Private, or Contract Carrier Law of Colorado was not designed and drafted for the purpose of giving carte blanche authority to individuals, to give them the right to indulge in selected transportation business, taking such customers as they desire, and refusing others, without a real basis for the existence of a private or con-

tract carrier relationship with shipping customers.

If any other philosophy were adopted. said the commission, it would mean that no private carrier application could ever be rejected. Anyone who desired could enter into the business of private transportation, skimming all the cream in the transportation field, giving highly personalized, specialized service, with guaranteed volume, to assure adequate operating ratios, to the end that the common carrier system, and, hence, public transportation for members of the general public who are not in a position to provide transportation for themselves, would be lost, and the ordinary person deprived of any public transportation whatsoever.

The commission denied over-the-road authority to any point in the state. The aspect of local carriage within metropolitan Denver presented an entirely different situation. The combination of storage, warehousing, and transportation raises the possibility of commingling the unregulated with the regulated, to the end that one might be utilized as a loss leader to accrue advantage for the other, the commission said. Once a person engaged in an unregulated business, such as storage and warehousing, is given authority

to transport commodities as a carrier for hire, he is immediately given a competitive advantage, unless his competitors are likewise accorded the same facilities and advantages.

Where the commission had permitted transportation for hire in the past, in connection with warehousing, there had been a demand for the type of service involved. To deny the present application with respect to the Denver area would be invading the nonregulated field of warehousing, giving benefit and advantage to one and penalizing the other.

The commission did not say that such a factor alone was controlling, but where, as in this case, there were customers of the warehouse who needed and demanded the service to be offered, who would enter into special contracts-either oral or written-with the applicant, and who would otherwise be inconvenienced by lack of a co-ordinated private carrier service for the storage of their materials in the applicant's warehouse, the commission believed it was in the public interest to authorize such carriage transportation on a limited scale. Re Market St. Transfer & Storage Co., Inc. Application No. 17161, Decision No. 52547, June 23, 1959.

3

Private Carrier Permit Considered Lesser of Two Evils

THE Colorado commission, in approving a private permit holder's request for permission to add a customer to his list, commented that it was better to allow the carrier for hire to perform specialized services than to compel a shipper to engage in commercial carriage. Private carrier permit applications, said the commission, present grave and serious problems.

On the one hand there are the natural needs and desires of the shippers for a custom, personalized service, which, in many instances, is to satisfy the desires of customers and to meet the competitive service of other businesses in the same field. At the same time, however, the commission is faced with a greater expanding demand for such personalized, custom service, either through private or contract carrier, or commercial carrier, which undoubtedly constitutes an erosion upon the business available to common carriers, and which possibly could ultimately lead to a destruction of the integrity of the public

PROGRESS OF REGULATION

transportation business. Thus, a regulatory commission is faced with the dilemma of serving the needs of shippers, whom it is duty-bound to serve, and at the same time maintaining the integrity of the common carrier, or public transportation system.

The commission noted that it could indulge in a dog-in-the-manger attitude, and adopt a policy of wholesale rejection of private carrier applications. It was fearful, however, that such policy would be inconsistent with the free movement of goods which the shippers needed and demanded.

In the present case, the shipper had testified that his competitive position had suffered by virtue of his failure to give immediate deliveries, and that it was not feasible for him to obtain the services of

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a common carrier to perform the needed service.

The shipper had inferred that it would necessarily have to furnish the service to itself, in the alternative.

Put the commission denied, in the same application, permission to add a second customer to the permit holder's list. The shipper had not evidenced a need of personalized service. It appeared to be more a matter of personal friendship. In view of the adequate existing common carrier authority to perform the requested service, said the commission, which undoubtedly would be impaired, it did not feel justified in granting the request. Re De George (De George Transfer & Storage Co.) Application No. 17163, Decision No. 52565, June 25, 1959.

Other Recent Rulings

No Right to Reparation. The U. S. Supreme Court ruled that a shipper under the Motor Carrier Act cannot challenge in postshipment litigation the reasonableness of the carrier's charges made in accordance with a filed tariff. T.I.M.E., Inc. et al. v. United States, 3 L ed 2d 952, 79 S Ct 904.

Operating Evidence for Rate Change. A federal appeals court upheld a Federal Power Commission decision which ruled that a natural gas producer rate change was not sustained by sufficient evidence where no showing was made as to the producer's cost of operations or investment in plant. Episcopal Theological Seminary of the Southwest et al. v. Federal Power Commission, Nos. 14581, 14588, June 18, 1959.

Equity and Commission Powers. The

Pennsylvania supreme court held that the basic right of a railroad to use a siding on a certain tract of land was a matter within the jurisdiction of a court of equity and beyond the power of the commission to decide, where the case might involve trespass or an unreasonable increase in the burden on the land. Rogoff v. Buncher Co. 151 A2d 83.

Water Rate Increase. The Missouri commission authorized a water company to increase rates to a level calculated to yield a return of 5.06 per cent, this being the first rate change for the company in thirty-six years. Re St. Joseph Water Co. Case No. 14,105, May 28, 1959.

Stock Dividend. The Missouri commission authorized the Arkansas-Missouri Power Company to issue a stock dividend where it found that it would not impair

the company's ability to perform its service obligations or impair its capital structure. Re Arkansas-Missouri Power Co. Case No. 14,209, June 1, 1959.

Cost Evidence Admissible. In denying a petition for reconsideration, the Federal Power Commission held that cost evidence is admissible in a natural gas producer certificate proceeding to determine whether a proposed price meets the statutory standard of public convenience and necessity. Re Transwestern Pipeline Co. et al. Docket Nos. G-14871 et al. June 1, 1959.

Sewer Extension Rule. The Wisconsin commission directed a sewer utility to establish a rule whereby it would construct at its own expense all extensions within a distance of 50 feet of the end of an existing main, with applicants contributing the cost of extension beyond the 50-foot portion, exclusive of connecting or outfall sewers. Watral v. City of Hayward, 2-U-5158, June 5, 1959.

Part-time Agency Service. A railroad company, though not permitted to discontinue agency service entirely at a small station, was authorized by the Wisconsin commission to maintain only a part-time agency service at the station, observing posted hours and continuing less-thancarload service in order to satisfy the public needs. Re Chicago, M., St. P. & P. R. Co. 2-R-3408, June 11, 1959.

Telephone Boundary Service. The Wisconsin commission directed a telephone company to extend direct service from its exchange to an applicant residing in a boundary-line town served by both this

company and another company, where such other company would provide extended area service to the desired exchange only upon the payment of a substantial construction charge and where the service so ordered would best accommodate the needs of the applicant. Re Peters, 2-U-5165, June 11, 1959.

Electric Rate of Return. A small electric utility was authorized by the Wisconsin commission to increase rates sufficiently to afford a rate of return of 6 per cent based on a net book value rate base. Re City of Lake Mills, 2-U-5142, June 15, 1959.

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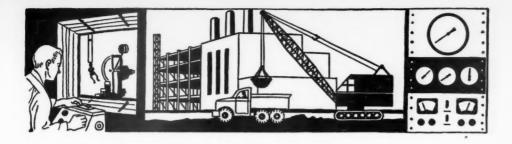
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Operative Rights. The California commission held that, while the better policy is to construe operative rights to be sufficiently broad to permit carriers and shippers to have the benefits of new methods and techniques, the holder of a certificate has the obligation to inaugurate new service when the public requires it. Re Valley Express Co. Decision No. 58601, Application No. 40718, June 16, 1959.

Grant of Additional Authority. The Utah supreme court rejected a contention that the commission acted arbitrarily in granting additional authority to a contract carrier to haul freight for contract shippers at a lower rate than that charged by common carriers, where the latter would not be deprived of any business since the particular shippers had previously hauled their own freight and would continue to do so if the carrier failed to obtain the necessary authority. Salt Lake-Kanab Freight Lines, Inc. v. Robinson (A. B. Robinson Truck Line) et al. 339 P2d 99.



Industrial Progress

ver \$460,000,000 Spent by VEPCO on Facilities In Past 10 Years

RGINIA Electric and Power Comny has spent over \$460,000,000 in iding new facilities and plants durthe past ten years, A. H. Mcwell, Jr., president, announced rently. For the first six months of 59, \$22,720,000 was spent of an imated construction budget of \$53,-0,000 for 1959. Mr. McDowell said t the continuing construction exnditures are necessary to meet the mand of Vepco's customers.

During the past twelve months, he d, 25,000 new customers had bught the total number served by pco to 729,875 electric customers 195,295 gas customers.

rida P&L Orders 300,000 kw Generator from G-E

ORIDA Power & Light Company liami, Fla.) has purchased a 300,- b kilowatt steam turbine-generator t from General Electric Company's rge Steam Turbine-Generator Detument

According to the Florida utility, s had been submitted by both dostic and foreign manufacturers for maller 240,000 kilowatt unit, but a ppraisal of the future electric powoad requirements indicated a largunit was needed.

The unit sold by General Electric cheduled for delivery in September 1961, and "is larger than any that foreign concerns could deliver" by date, according to Florida Power ight Company.

Burroughs Announces New ne of Automatic Accounting Machines

COMPLETE new line of autoic accounting machines that will solete thousands of conventional bookkeeping machines in use today" has been developed by Burroughs Cor-

Ray R. Eppert, Burroughs president, said the new series of electromechanical machines for business and industry represents one of the most important advances in conventional bookkeeping equipment in the past decade. Ten models of the machine will be placed on the market this month.

Designed for all types of businesses—from dress shops to public utilities—the general purpose machine is the first fully automatic mechanical accounting device equipped with a "dual printer," a special feature that increases operating speeds by as much as 50 per cent.

The new device, a numeric data processing accounting machine, Series F5000, is an outgrowth of Burroughs' famed Sensimatic. Like the Sensimatic, the new line fills the middle ground between the company's small portable bookkeeping machines and high speed electronic data processing equipment, Mr. Eppert declared.

Prices will range from about \$3,000 to \$7,500.

Production on six of the 10 new models already has been started at the firm's sprawling Plymouth, Michigan, plant. Production of remaining models will begin before the end of the year, he said.

I-T-E to Sell Transformers in Change of Sales Policy

I-T-E Circuit Breaker Company, Philadelphia, joins the ranks of major transformer suppliers with an announcement that it will sell direct to utilities and industry its complete line of liquid-filled and dry-type distribution and power substation transformers, according to a recent announcement.

The company has produced transformers since 1948—but solely for use

in its own rectifier and unit substation products.

The basic change in sales policy is a first step in a move by I-T-E to sell direct to the user. I-T-E's Transformer & Rectifier Division produces transformers for its own rectifier and primary and secondary unit substations—in addition to the outdoor substation type.

Three-phase substation transformers are available in a range from 112.5 through 10,000 kva. Single-phase units run from 100 through 3,333 kva. Primary voltages range to 69 kv.

Manual Shows Savings From Continuous Boiler Blowoff

POSSIBLE savings in both labor and operating costs through the use of continuous boiler blowoff systems rather than intermittent manual blowoff can yield a higher return on equipment cost than almost any other type of plant investment, according to a revised bulletin on continuous blowoff equipment just published by Cochrane Corporation.

In a typical example, a 600 psig boiler evaporation 100,000 lbs./hr., heat recovered during a 4000 hr. operating period amounted to a fuel saving of \$3080. A simplified method including quick-reference charts is given in the bulletin to enable boiler users to estimate potential heat savings for various continuous blowoff arrangements.

Many types of continuous blowoff installations may be selected, depending on plant requirements. Such systems as simple heat exchangers, or flash tanks, flash condensers and heat exchangers are discussed and illustrated in the publication.

Copies of the bulletin (Pub. 5700-A) may be obtained from Cochrane Corporation, 17th street below Allegheny avenue, Philadelphia 32, Pa.

(Continued on page 20)

McCandless Heads Gas Unity Group

BRUCE A. McCANDLESS, vice president of the Milwaukee Gas Light Company, has accepted chairmanship of the Gas Unity Committee, a group set up in 1957 to develop a program of local-level education and advertising to promote the use of gas, both city-main and liquefied petroleum.

As a pattern for its future operations, the Committee has selected the so-called Milwaukee Plan which has been proved in the field to be the most effective way to achieve successful marketing teamwork of gas utilities and LP-Gas distributors.

The text of the Milwaukee Plan will be distributed by the American Gas Association to all gas utility members and by the Liquefied Petroleum Gas Association to its members.

According to H. Leigh Whitelaw, secretary of the Committee, the Wisconsin operation, involving a gas utility and LP-Gas dealers in a 25-to-30-mile area surrounding the city of Mil-

waukee, "has helped clear public to fusion that usually results from proting two different gas industries and has helped sell the mutual pubservice goal of both industries.

"It was important to impress of sumers with the fact that gas servis available wherever they live," so Mr. Whitelaw. "The Milwaukee Plass succeeded in making this impression by means of a cooperative program that faces up to practical conjective problems and converts the into mutually advantageous sales prential."

Results, he said, have been improment in the public's attitude towagas and gas burning products and solid platform for future expansion of the entire gas industry in the Manukee area.

The committee now plans to of an exposition of its plan to indus leaders at various Fall meetings, cluding those of the New Engla Gas Association, the Pacific Co Gas Association and the Americ Gas Association. President Edwa A. Norman of the Gas Appliat Manufacturers Association is exped to refer to the Gas Unity Comittee's proposal at the A. G. A. me ing in October.

Electro-Motive Appointment

THE appointment of Kenneth Wolf, manager of the sales engine ing section to manager of the prod application section of the sales department of Electro-Motive Division General Motors is announced by V tor E. Rennix, general sales mana for Electro-Motive.

At the same time, Mr. Rennix nounced the appointment of War A. Fox, former supervisor of the sengineering section, as manager the section succeeding Mr. Wolf.

"Expanding activity reflecting creasing interest in our new produ for the utility and petroleum fields well as our new line of locomoti have been responsible for these personnel changes" Mr. Rennix said.

North Carolina Tel. Installs Microwave Equipment

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SEEKING reduced costs and materiance while expanding toll circ facilities, North Carolina Telepho Company, Matthews, N. C., instal microwave equipment which a serves more than 80 per cent of utility's customers.

Two 90-foot high self-support (Continued on page 22)

This is not an offer of these securities for sale. The offer is made only by the Prospectus.

NEW ISSUE

396,000 Shares

Public Service Company of New Hampshire Common Stock

(Par Value \$5 per Share)

Price \$18.625 per Share

Copies of the Prospectus may be obtained in any State in which this announcement is circulated from only such of the underwriters, including the undersigned, as may lawfully offer these securities in such State.

Kidder, Peabody & Co.

Blyth & Co., Inc.

A. G. Becker & Co. Eastman Dillon, Union Securities & Co. Goldman, Sachs & Co.

Harriman Ripley & Co. Lehman Brothers Merrill Lynch, Pierce, Fenner & Smith

Stone & Webster Securities Corporation White, Weld & Co. Dean Witter & Co.

A. C. Allyn and Company American Securities Corporation Coffin & Burr Incorporated

Estabrook & Co. Hallgarten & Co. Hemphill, Noyes & Co.

Hornblower & Weeks W. E. Hutton & Co. Lee Higginson Corporation

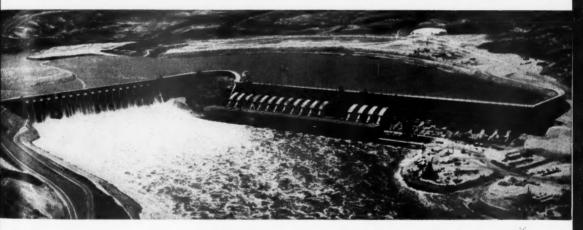
F. S. Moseley & Co. Paine, Webber, Jackson & Curtis

Townsend, Dabney & Tyson Tucker, Anthony & R. L. Day Wertheim & Co.

July 23, 1959.

PUBLIC UTILITIES FORTNIGHTLY-AUGUST 13

Newport News builds 10 unique runners



For Chief Joseph Dam in Washington State

Cast buckets are welded to cast crown and band—then stress relieved

The Francis-type runner above illustrates Newport News' complete facilities for fabricating heavy equipment.

It also illustrates the specialized techniques Newport News frequently uses in jobs of this type. Gibson tests for these units are very favorable. Before you go ahead on a project like this, be sure to get a bid from Newport News. Whether it's penstocks, butterfly valves, pumps or turbines, you'll get the benefit of the modern plant methods and production facilities of one of the country's oldest and largest builders of water power equipment.

Newport News

Shipbuilding and Dry Dock Company
 Newport News Virginia

Engineers... Desirable positions available at Newport News for Designers and Engineers in many categories. Address inquiries to Employment Manager.

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support 22) sust B. steel towers, one unit located at Wadesboro while the other in Marshville—a distance of 20 miles, were designed, fabricated, and erected by Blaw-Knox Company, Blawknox, Pa.

More than 5,000 of the telephone company's 6,459 customers are served by the microwave and multiplex equipment which operates on frequencies of 5974.8, 6226.9, and 6345.5 megacycles. A passive reflector type antenna is mounted to the top of the Blaw-Knox Model MRH tower.

The Wadesboro tower's 10-foot square base spread was ideal for the limited area available near the utility's operations and office building.

Consumers Power Shows Increase In Electric and Gas Use

CONSUMERS Power Company customers used 16 per cent more electricity and 20 per cent more gas in the first half of 1959 than in the first half of 1958, President Dan E. Karn announced.

For the 12-month period ended June 30, the increase in electric use was 8 per cent and in gas use 13 per

cent, as compared with the preceding 12 months.

Mr. Karn said the improvement reflects better industrial conditions plus some increase in number of customers and in average home use of electricity and gas.

First Unit at Oliver Dam Goes into Operation

POWER began flowing recently from Oliver dam, the Georgia Power Company's new hydroelectric generating plant on the Chattahoochee river at Columbus.

The plant's initial power is being produced by an 18,000-kilowatt generator. When three additional generators are placed in service at later dates this summer, Oliver dam's total generating capacity will reach 60,000 kilowatts, making it one of the company's larger hydroelectric plants.

Construction work began two years ago. The company points out that the \$14,410,000 installation will increase Georgia Power's total generating capacity to 1,836,670 kilowatts, providing "ever-increasing encouragement"

for business firms seeking industrisites in the state.

Oliver dam is interconnected by company's vast network of transm sion lines with its other steam a hydroelectric plants throughout state of Georgia.

A 2,480-acre lake has been crea by the new dam. Provision has be made for the future installation navigation locks at the option of federal government.

Oliver dam is one of a group dams known as the Middle Chat hoochee Development. This development will contribute toward full u ization of the Chattahoochee for magation, flood control, water suppl for municipalities and industries, a recreation purposes, in addition to production of electric power.

The 75-foot-high and 2,021-folong dam, with its powerhouse stallation, is named for James Oliver, former executive vice predent and general manager of the Geigia Power Company. Now retin Mr. Oliver is a veteran of 43 years service in the public utility indust

Patt "PROFIT-YARDS"



MULTI-PURPOSE P&H MOBILE CRANES FOR UTILITIES' MATERIALS HANDLING AND MAINTENANCE WORK

Profit-Lifts are the end product of advanced P&H design and engineering features that result in higher production, lower operating cost—more net profit for P&H users. Truck cranes from 10 to 80 tons—crawler cranes from 20 to 110 tons—crawler excavators from ½ to 3½ cu. yds. See your P&H dealer for all of the profitable facts or write: Dept. 534A, Harnischfeger Corporation, Milwaukee 46, Wisconsin.

HARNISCHFEGER

AGA Gas Heating Controls Service Manual Available

AVAILABILITY of a new, authorative handbook for servicing of or trols on gas central heating equipment and gas space heaters has been a nounced by the American Gas Association.

Entitled "A.G.A. Gas Heat Controls Service Manual," the bo combines in one volume service structions for the various makes a models of gas heating equipment of trols in general use. It is designed fon-the-job use by gas company serice departments, plumbing and heat contractors, or any others concern with adjusting, maintaining or repaing gas househeating equipment.

The manual was prepared as project of the Joint Committee on G Appliance Service Manuals of t American Gas Association and t Gas Appliance Manufacturers Association

Material for text and illustration was supplied by control manufaturers, who also reviewed the manufactority accuracy and authenticity.

Full information and prices may obtained from the American Gas A sociation, 420 Lexington aven New York 17, N. Y.

(Continued on page 24)

PUBLIC UTILITIES FORTNIGHTLY-AUGUST 13,

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INDUSTRIAL PROGRESS—(Continued)

Westinghouse Gets Generator Order

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THE Southern California Edison Company has orde a 210,000-kilowatt turbine-generator from Westi house Electric Corporation.

The machine will be installed in the electric utili offsh Huntington Beach generating station. Single-handermia it could supply all the electrical needs of a city of m Septe than 400,000 residents.

The turbine portion of the unit will be built at Westinghouse steam division plant in Lester, Pa., w the generator will be built at the East Pittsburgh pla

G-E Appointment

RICHARD H. GRAHAM has been appointed to new post of Consultant-Product Planning at Gene Electric's Atomic Power Equipment Departm (APED), APED General Manager George White nounced recently.

Mr. Graham came to APED from Lockheed Aircra Missile and Space Division where he was a staff scient For the past two years he has acted as a consultant the U. S. Atomic Energy Commission's Advisory C mittee on Reactor Safeguards. Prior to joining Lo heed, Mr. Graham served for two years with the Ato Energy Commission as chief of the Reactor Engineer Section in the Division of Reactor Development.

B&W Issues Data Card on Croloy 25-20

ENGINEERS, purchasing agents and others involved in use of stainless tubular products in high temperat applications will be interested in a new data card p lished by the Tubular Products division of The Babe & Wilcox Company. This card describes the proper of B&W Croloy 25-20 (TP310)—its chemical com sition, size ranges, and short time high temperat tensile and rupture properties. While

Copies of the data card, identified as TDC-195, available without charge through the division's gene sales offices at Beaver Falls, Pa.

Minnesota Mining Introduces New Pipe Protection Tape

"DESIGNED specifically for wrapping straight per Consections" is the description given for its new, press d Rich sensitive vinyl pipe protection tape by Minnesota Min ced from the first sensitive vinyl pipe protection tape by Minnesota Min ced from the first sensitive vinyl pipe protection tape by Minnesota Min ced from the first sensitive vinyl pipe protection tape by Minnesota Min ced from the first sensitive vinyl pipe protection tape by Minnesota Min ced from the first sensitive vinyl pipe protection tape by Minnesota Min ced from the first sensitive vinyl pipe protection tape by Minnesota Min ced from the first sensitive vinyl pipe protection tape by Minnesota Min ced from the first sensitive vinyl pipe protection tape by Minnesota Min ced from the first sensitive vinyl pipe protection tape by Minnesota Min ced from the first sensitive vinyl pipe protection tape and the first sensitive vinyl pipe and tape and t and Manufacturing Company, Dept. D9-328, 900 Bran a pl Avenue, St. Paul 6, Minnesota. South

Called "Scotchrap" brand pipe protection tape No. 1102, the excellent tensile strength and tear resista combined with balanced elongation allows the tape machine wrap smoothly at any taping angle, 3M s The stopping, starting and jerking of a taping mach will not rupture the tape.

Along with the new vinyl backing, a new, balan high tack adhesive is used with extra internal stren to stop tape displacement caused by the movement soil or pipe.

Highway Trailer Names New Eastern Distribu

THE Utility Sales Division of Highway Trailer Co pany has announced the appointment of Eastern Ea Boring and Equipment Company, 251 Kidder str Wilkes-Barre, Pa., as its distributor for utility produ in Pennsylvania, Eastern and Western New Yo Maryland and in Washington, D. C.

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1 Westi RST deliveries of natural gas from tric utilit offshore drilling platform in Calie-handernia waters are scheduled to begin ity of m September, it was announced re-

built at The gas will be purchased by Pa-, Pa., whe Lighting Gas Supply Co. of Los ourgh plageles from production of Standard Co. of California and Humble Oil Refining Co. off a drilling platm set in 100 feet of water near mmerland, between Santa Barbara | Ventura. at Gene

Departm Initial deliveries are expected to be White rates of 1,000,000 cubic feet a day, d Aircra 2,000,000 cubic feet daily within aff scient months of the start of delivery. nsultant Deliveries may be made for a period only 18 months should Standard ning Lo d Humble decide they want to use the Ator for repressuring operations. If, Engineer the other hand, pressure control is indicated, deliveries would conue on, what Standard reports, will 25-20 an increasing basis.

rs invol P.L.G.S. will take the Standardemperatumble gas at east Carpinteria, up coast from Ventura, where Standplans to build oil handling facili-The gas is due to come to the nt site in one of three submarine es laid on the ocean floor from the shore platform.

C-195, While the Standard-Humble gas ll be the first from an offshore platn's gene rm, P.L.G.S. has for the past four ars taken offshore gas from Monte-Oil Co.-Texaco Inc. production Pipe ar Seal Beach; and from Richfield Corp., near Rincon Point, in Venraight p a County. The Monterey-Texaco, y, press d Richfield wells are, however, pro-ota Min ced from man-made islands, rather , 900 Buan a platform.

Southern Cal. Edison Starts ape No. ork on Sea Water Converter

he tape, 3M s DNSTRUCTION of California's , 3M s st general purpose sea water distilla-ng mach n plant began near Oxnard re-

ntly.

nt wement id the plant should be in operation out November 1st.

It will have a capacity of 100,000 istribut llons a day and will be used as an

ailer to perimental unit.

Executive vice-president, James F.
der sta avenport, said the plant will be used imarily for research and developert.

liveries of Gas from California Westinghouse Announces 14.4-KV "Universal" Pole-type Transformer

A NEW 14.4-kv "Universal" poletype distribution transformer has been announced by Westinghouse Electric Corporation that covers the voltage range of four previous units. The new transformer will simplify and reduce stocking by utilities and increase flexi-

bility of application.

The new 14,000/24,940-volt 125-kv BIL unit supersedes the 13,200-, 13,-800-, and 14,400-volt 95-kv BIL transformers, and a 14,400-volt 125kv BIL unit. This is possible since tap voltages are now selected to agree with previous standard voltages-13,800, 13,200, 12,870, and 12,540, all at full capacity.

Applied through the full range of standard kva ratings only 54 styles in 10 designs supersede 81 styles in 22

The new transformers can be used in 24,940-volt ground-wye systems as well as on delta systems.

For further information, write Westinghouse Electric Corporation, P. O. Box 2099, Pittsburgh 30, Pa.

McCabe-Powers Announces New Hydraulic Derrick

A NEW hydraulic derrick, known as the Series PM-10 "Pole-Master." has been added to the firm's Powers-American line of utility bodies and equipment, according to an announcement made by McCabe-Powers Body Company, St. Louis, Mo. "The new unit, which replaces the company's widely-used Series PM-1 derrick in the line, has been greatly improved," stated Brooke Daly, vice president of the firm. "Design has been changed for increased strength and efficiency of operation," he added, "and an optional hydraulic head sheave extension has been included to permit handling of poles substantially greater in length.

The Series PM-10 is fully hydraulic, with all operation controlled by levers which are normally installed in rear curbside compartment of the truck body. Power is supplied by a heavy-duty vane-type hydraulic pump driven by a power take-off on the truck

transmission.

Maximum rated capacity is 8,000 lbs. Capacity for body-loading is 2,500 lbs, and "down pressure" which can be exerted for digging operations is 1,000 lbs. Operating range exceeds 200 degrees, permitting positioning of the head sheave at any point from stowed position to within 18" of ground.

Three sizes are available. The Series PM-10-40 has a maximum head sheave height of 21'2" for handling 40' poles, the PM-10-55 has 24'6" maximum height for handling 55' poles and the PM-10-70 has 30' height for handling 70' poles, Optional hydraulic head sheave extension, available on the PM-10-40 and PM-10-55, increases maximum height to 24'2" and 29'2" for handling 50' and 65' poles respectively.

Derrick is ideally suited for use with the company's Series DF-1 "Earth-Master" Hydraulic Digger which will dig holes up to 20" in diameter and

10' in depth.

Descriptive literature and price information can be obtained from Mc-Cabe-Powers Body Company, 5900 North Broadway, St. Louis 15, Mis-

I-T-E Announces Specifications of Substation Transformer Line

SPECIFICATIONS for a complete line of power and distribution transformers have been announced by I-T-E Circuit Breaker Company, Philadelphia.

The line incorporates units formerly sold only with I-T-E substations plus new single-phase and higher voltage, higher capacity units.

The transformers are available in liquid-filled and both sealed and ventilated dry-type models for utility and industry applications for primary voltages up to 69 kilovolts and for loads up to 12,500 kva.

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George K. Kallenbach, Operating Superintendent, tells why

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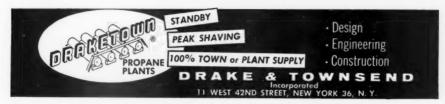
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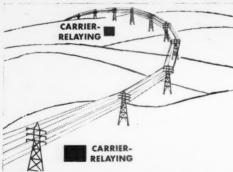
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General Electric Opens a New Era in Protective Relaying

. . . with first static phase-comparison relay

The perfection of reliable static components makes possible practically maintenance-free relays... desired by utility men for years. In addition, improved forms of relays using static components will open new fields of application never economically possible before. Static protective relays can now be created that will provide the functions and the characteristics required by modern power systems—higher speed, less maintenance, increased sensitivity, lower burdens.

A line of static protective relays is now on the drawing board for protection of the complete electric utility system ... transmission lines, transformers, generators and buses.

STATIC PHASE-COMPARISON RELAY is the first in the General Electric line of new static relays. It compares the phase position of currents at the line terminals to provide simultaneous, high-speed tripping of a faulted transmission line. Transistor measuring elements provide higher speed. In provide stability of characteristics, and reduction in manatenance costs.

G-E TRANSISTOR CARRIER CURRENT EQUIPMENT provides se communication tie for co-ordinated line protection. F: |y| transistorized transmitters and receivers offer high-sp d channels... conservation of frequency spectrum... d full 10-watt power output.

This joint product development helps assure electric 0 ities of improved system protection now . . . and econom all system expansion when load growth demands it.

MORE POWER TO AMERICA

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